





# INDEX OF PATENTS

RELATING TO

# ELECTRICITY,

EMBRACING PATENTS ISSUED BY

THE UNITED STATES PATENT OFFICE

FROM JULY 1, 1893, TO JUNE 30, 1894.

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APPENDIX No. XIII.

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COMPILED UNDER THE DIRECTION OF THE COMMISSIONER OF PATENTS.

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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1895.

282522



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# APPENDIX No. XIII.

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## PART I.

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CONSISTING OF A

SUB-CLASS INDEX OF ALL PATENTS

RELATING TO

**ELECTRICITY.**

Issued from July 1, 1893, to June 30, 1894, inclusive, giving names of Inventors,  
and dates and numbers of Patents in each sub-class in  
numerical and chronological order.

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# CLASSIFIED INDEX

## OF

# PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1893, TO JUNE 30, 1894.

### 171. GENERATION.—6. BATTERIES—GALVANIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
502,405	Lyon, E. H	Aug. 1, 1893	511,514	Curtis, F. G	Dec. 26, 1893
503,415	Gabarro, R	Aug. 15, 1893	512,055	Pearsons, J. J	Jan. 2, 1894
503,589	Evershed, S	Aug. 22, 1893	512,757	Silvey, W. L	Jan. 16, 1894
504,130	Libbey, H. W	Aug. 29, 1893	514,115	Bayer, F	Feb. 6, 1894
504,746	Von der Poppenbury, J	Sept. 12, 1893	514,845	Burns, P. C	Feb. 13, 1894
506,353	Wheelock, B. J	Oct. 10, 1893	514,979	Wilson, D. H	Feb. 20, 1894
507,708	Gregg, J. A. S	Oct. 31, 1893	515,432	Hubbell, C. J	Feb. 27, 1894
508,551	Mills, W	Nov. 14, 1893	516,653	Lary, L. F	Mar. 20, 1894
509,381	Jordan, L. F	Nov. 28, 1893	519,330	Hertel, C. W. A	May 8, 1894
510,604	Johnson, L. F	Dec. 12, 1893	520,120	Northrup, E. F	May 22, 1894
511,159	Poppowitsch, E	Dec. 19, 1893	520,429	Hoggson, S. H	May 29, 1894
511,434	Johnston, H. T	Dec. 26, 1893	521,260	Dunbero and Mohrdieck	June 12, 1894

### 171. GENERATION.—72. BATTERIES—SECONDARY.

500,622	Silvey, W. S	July 4, 1893	512,464	Carey, A. C	Jan. 9, 1894
501,723	King, F	July 18, 1893	512,514	Morrison, W	Jan. 9, 1894
502,824	Morse, L	Aug. 8, 1893	512,567	Stine, W. M	Jan. 9, 1894
502,825	Morse, L	Aug. 8, 1893	512,823	Hough, A	Jan. 16, 1894
504,370	Silvey, W. L	Sept. 5, 1893	513,245	Paget and Paget	Jan. 23, 1894
504,455	Reed, C. J	Sept. 5, 1893	513,910	Fraley, G. B	Jan. 30, 1894
505,467	Kitsee, I	Sept. 26, 1893	514,260	Carpenter, H. H	Feb. 6, 1894
507,139	Kennedy, C. W	Oct. 24, 1893	514,267	Legay and Legay	Feb. 6, 1894
509,266	Usher, E. P	Nov. 21, 1893	515,502	Rowley, L. B	Feb. 27, 1894
509,267	Usher, E. P	Nov. 21, 1893	516,038	Willard, T. A	Mar. 6, 1894
509,268	Usher, E. P	Nov. 21, 1893	516,253	Whitney, E. R	Mar. 13, 1894
509,269	Usher, E. P	Nov. 21, 1893	517,018	Ballard, G. L	Mar. 27, 1894
509,270	Usher, E. P	Nov. 21, 1893	517,455	Henry, G. B	Apr. 3, 1894
509,271	Usher, E. P	Nov. 21, 1893	518,966	Phillips and Entz	May 1, 1894
509,272	Usher, E. P	Nov. 21, 1893	519,602	Elieson, C. P	May 8, 1894
512,253	Lockwood, W. C	Jan. 2, 1894			

### 171. GENERATION.—73. BATTERIES—THERMAL.

511,245	Mestern, M	Dec. 19, 1893	521,168	Jungner, E. W	June 12, 1894
518,542	Cox, H. B	Apr. 17, 1894			

### 171. GENERATION.—23. FRICTION GENERATORS.

504,740	Patee, T. A	Sept. 12, 1893	514,524	Waite, H. F	Feb. 13, 1894
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### 171. GENERATION.—95. GALVANOMETERS.

501,144	Hochhausen, W	July 11, 1893	510,177	Jewell, E. W	Dec. 5, 1893
501,589	Hunter, R. M	July 18, 1893	511,376	Thomson, E	Dec. 26, 1893
502,022	Thomson, E	July 25, 1893	511,503	Bruger, T	Dec. 26, 1893
502,077	Hunter, R. M	July 25, 1893	511,791	Perry and Holland	Jan. 2, 1894
502,693	Bell, L	Aug. 8, 1893	512,250	Hoyt, A. H	Jan. 2, 1894
504,754	Rudd, C. H	Sept. 12, 1893	513,975	Ayrton and Mather	Feb. 6, 1894
506,066	Opperman, J	Oct. 3, 1893	514,075	Hitt, S. E	Feb. 6, 1894
508,562	Thomson, E	Nov. 14, 1893	514,258	Bristol and Bristol	Feb. 6, 1894
509,578	Lintner, G. A	Nov. 28, 1893	514,581	Willyoung, E. G	Feb. 13, 1894
510,074	Louis, O. F	Dec. 5, 1893	514,582	Willyoung and Garver	Feb. 13, 1894

## 171. GENERATION.—95. GALVANOMETERS—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
514,593	Garver and Willyoung -----	Feb. 13, 1894	518,245	Holden, F -----	Apr. 17, 1894
516,341	Ayrston and Mather -----	Mar. 13, 1894	519,945	Garey, W. E -----	May 15, 1894
516,823	Knowles and Robinson -----	Mar. 20, 1894	520,129	Wood, J. J -----	May 22, 1894
516,839	Robinson, L. T -----	Mar. 20, 1894	520,361	Hunter, R. M -----	May 22, 1894
516,855	Willyoung, E. G -----	Mar. 20, 1894	520,789	Knowles, E. R -----	June 5, 1894
517,162	Hunter, R. M -----	Mar. 27, 1894	520,963	Knowles, E. R -----	June 5, 1894
517,163	Hunter, R. M -----	Mar. 27, 1894	520,964	Knowles, E. R -----	June 5, 1894
517,253	Willyoung, E. G -----	Mar. 27, 1894			

## 171. GENERATION.—122. INDUCTORIUMS—INDUCTION COILS.

509,445	Nowotny, J. S -----	Nov. 28, 1893	514,981	Wilson, D. H -----	Feb. 20, 1894
511,742	Wotton and Bostrom -----	Dec. 26, 1893			

## 171. GENERATION.—123. INDUCTORIUMS—TRANSFORMERS—ROTARY.

512,820	Henry, J. C -----				Jan. 16, 1894
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## 171. GENERATION.—124. INDUCTORIUMS—TRANSFORMERS—STATIONARY.

506,577	Adams and Adams -----	Oct. 10, 1893	513,421	Rowland, H. A -----	Jan. 23, 1894
507,526	Carstarphen, W. P -----	Oct. 31, 1893	513,422	Rowland, H. A -----	Jan. 23, 1894
508,422	Hornberger, W. H -----	Nov. 14, 1893	515,020	Ricker, A. L -----	Feb. 20, 1894
508,650	Thomson, E -----	Nov. 14, 1893	516,829	Moody, W. S -----	Mar. 20, 1894
508,654	Thomson, E -----	Nov. 14, 1893	516,850	Thomson, E -----	Mar. 20, 1894
508,655	Thomson, E -----	Nov. 14, 1893	518,946	Forbes, G -----	May 1, 1894
510,640	Hornberger, W. H -----	Dec. 12, 1893	519,076	Thomson, E -----	May 1, 1894
512,603	Coffin, C. L -----	Jan. 9, 1894	519,376	Bradley, C. S -----	May 8, 1894
513,420	Rowland, H. A -----	Jan. 23, 1894	520,908	Waite, H. F -----	June 5, 1894

## 171. GENERATION.—33. MAGNETO-ELECTRIC.

500,614	Reist, H. G -----	July 4, 1893	507,194	Wood, J. J -----	Oct. 24, 1893
500,902	Jefferson, G. W -----	July 4, 1893	507,297	Wilkes, G -----	Oct. 24, 1893
501,049	Bassett, N. C -----	July 11, 1893	507,344	Wood, J. J -----	Oct. 24, 1893
501,060	Fiske, J. P. B -----	July 11, 1893	507,689	Ricker, A. L -----	Oct. 31, 1893
501,117	Tyler, H. L -----	July 11, 1893	507,690	Ricker, A. L -----	Oct. 31, 1893
501,193	Shaw, A. J -----	July 11, 1893	508,624	Knowles, E. R -----	Nov. 14, 1893
501,194	Sperry, E. A -----	July 11, 1893	508,634	Priest, E. D -----	Nov. 14, 1893
501,376	Smith, J. J. and Findlater, F -----	July 11, 1893	508,636	Reist and Fiske -----	Nov. 14, 1893
501,960	Reist, H. G -----	July 25, 1893	508,637	Reist, H. G -----	Nov. 14, 1893
502,377	Paugh, S -----	Aug. 1, 1893	508,651	Thomson, E -----	Nov. 14, 1893
502,384	Ryan, H. J -----	Aug. 1, 1893	509,620	Hitt, S. E -----	Nov. 28, 1893
502,670	Hofbauer, F. X -----	Aug. 1, 1893	509,662	Hoffmann, C -----	Nov. 28, 1893
502,777	Sheldon, S. and Rooney, J. J -----	Aug. 8, 1893	510,102	Thiel, H. K -----	Dec. 5, 1893
502,988	Parshall, H. F -----	Aug. 8, 1893	510,460	Wilson, D. H -----	Dec. 12, 1893
503,106	Wheeler, S. S -----	Aug. 8, 1893	510,472	Eickemeyer, R -----	Dec. 12, 1893
503,445	Thomson, E -----	Aug. 15, 1893	510,862	Hoffmann, C -----	Dec. 12, 1893
503,449	Blood, J. B -----	Aug. 15, 1893	510,892	Coffman, J. R -----	Dec. 19, 1893
503,574	Bradley, C. S -----	Aug. 22, 1893	510,952	Averill, F. E -----	Dec. 19, 1893
504,581	Diehl, P -----	Aug. 22, 1893	511,214	Robinson and Perkins -----	Dec. 19, 1893
504,177	Landheir, F. H -----	Aug. 29, 1893	511,328	Emery, C. E -----	Dec. 26, 1893
504,379	Warner, E. P -----	Sept. 5, 1893	511,916	Tesla, N -----	Jan. 2, 1894
504,401	Morrow, J. T -----	Sept. 5, 1893	512,424	Wood, J. J -----	Jan. 9, 1894
504,901	Bayles, R. N -----	Sept. 12, 1893	512,425	Wood, J. J -----	Jan. 9, 1894
504,914	Eldredge, R -----	Sept. 12, 1893	512,612	Hanahan, H. W -----	Jan. 9, 1894
505,184	Atwater, A. S -----	Sept. 19, 1893	512,843	Rodges, H. S -----	Jan. 16, 1894
505,247	Kosinski, W. S -----	Sept. 19, 1893	512,853	Wilkes, G -----	Jan. 16, 1894
505,539	Strong, G. S -----	Sept. 26, 1893	513,347	Taylor, H. H -----	Jan. 23, 1894
505,622	Atwater, A. S -----	Sept. 26, 1893	513,459	Dieckmann, G. F -----	Jan. 23, 1894
505,665	Lindell, R -----	Sept. 26, 1893	513,460	Fee, H. L -----	Jan. 23, 1894
505,729	Sherwood, W. J -----	Sept. 26, 1893	514,047	Waddell, M -----	Feb. 6, 1894
505,783	Ashley, R -----	Sept. 26, 1893	514,140	Wood, J. J -----	Feb. 6, 1894
505,926	Schmid, A -----	Oct. 3, 1893	514,150	Kester, J. F -----	Feb. 6, 1894
505,927	Schmid, A -----	Oct. 3, 1893	514,241	Potter, A. J -----	Feb. 6, 1894
503,957	Rahner, M -----	Oct. 3, 1893	514,817	Dufanet, O -----	Feb. 13, 1894
506,774	Feldkamp, F. A -----	Oct. 17, 1893	514,907	Brush, C. F -----	Feb. 20, 1894
506,775	Feldkamp, F. A -----	Oct. 17, 1893	515,467	Fritsche, W -----	Feb. 27, 1894

## 171. GENERATION.—33. MAGNETO-ELECTRIC—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
516,886	Wenström, J. -----	Feb. 27, 1894	518,562	Brown, H. P. -----	Apr. 17, 1894
515,613	Roberts, C. A. -----	Feb. 27, 1894	518,756	Hicks, T. H. -----	Apr. 24, 1894
515,882	Maynadier, J. E. -----	Mar. 6, 1894	518,768	Ricker, A. L. -----	Apr. 24, 1894
516,170	Waddell and Entz -----	Mar. 6, 1894	518,913	Brown, G. W. -----	Apr. 24, 1894
516,298	Crouch, F. J. -----	Mar. 13, 1894	518,944	Forbes, G. -----	May 1, 1894
516,417	Olevette, C. -----	Mar. 13, 1894	518,945	Forbes, G. -----	May 1, 1894
516,553	Sayers, W. B. -----	Mar. 13, 1894	519,097	Schmid, A. -----	May 1, 1894
516,732	Francis, E. R. -----	Mar. 20, 1894	519,188	Kersberg, R. -----	May 1, 1894
516,792	Bassett, N. C. -----	Mar. 20, 1894	519,280	Baxter, W. -----	May 1, 1894
516,794	Bell, L. -----	Mar. 20, 1894	519,281	Baxter, W. -----	May 1, 1894
516,797	Bell, L. -----	Mar. 20, 1894	520,152	Welch, R. K. -----	May 22, 1894
516,807	Henry, J. C. -----	Mar. 20, 1894	520,169	Ricker, A. L. -----	May 22, 1894
516,827	Lieb, C. A. -----	Mar. 20, 1894	520,264	Hoffmann, C. -----	May 22, 1894
516,837	Rice, E. W., jr -----	Mar. 20, 1894	520,773	Erben, H. F. T. -----	June 5, 1894
516,845	Thomson, E. -----	Mar. 20, 1894	520,781	Herrick, A. B. -----	June 5, 1894
516,848	Thomson, E. -----	Mar. 20, 1894	520,940	Sellers, C. -----	June 5, 1894
516,853	Turner, O. N. -----	Mar. 20, 1894	521,671	Rice, E. W., jr -----	June 19, 1894
517,831	Arnold, B. J. -----	Apr. 10, 1894	522,051	Fuller, R. -----	June 26, 1894
518,290	Thomson, E. -----	Apr. 17, 1894	522,052	Fyfe, J. C. -----	June 26, 1894
518,312	Egger and Wessel -----	Apr. 17, 1894	522,083	Paget, L. -----	June 26, 1894
518,444	Dickeman, H. E. -----	Apr. 17, 1894	11,354	Kintzing, R. C. ----- (Reis.)	July 25, 1893

## 171. GENERATION.—34. METERS.

500,868	Duncan, T. -----	July 4, 1893	513,391	Gudgell, C. -----	Jan. 23, 1894
501,000	Duncan, T. -----	July 4, 1893	514,131	Raab, C. -----	Feb. 6, 1894
502,454	Alberg, A. -----	Aug. 1, 1893	514,973	Tesla, N. -----	Feb. 20, 1894
503,595	Gregory, F. L. -----	Aug. 22, 1893	518,244	Haskins, C. D. -----	Apr. 17, 1894
503,805	Reckenzaum, A. -----	Aug. 22, 1893	518,265	Mix, E. W. -----	Apr. 17, 1894
505,243	Bristol, W. H. -----	Sept. 19, 1893	518,311	Duncan, T. -----	Apr. 17, 1894
505,660	Thomson, E. -----	Nov. 14, 1893	518,534	Olan, J. W. Th. -----	Apr. 17, 1894
508,661	Thomson, E. -----	Nov. 14, 1893	520,811	Thomson, E. -----	June 5, 1894
509,095	Perry, J. -----	Nov. 21, 1893	521,089	Reed, W. B. -----	June 5, 1894
509,750	Mottram, W. T. M. -----	Nov. 28, 1893	521,394	Thomson, W. -----	June 12, 1894
511,401	Bnllie, L. -----	Dec. 26, 1893	521,684	Thomson, E. -----	June 19, 1894
513,264	Henry, J. C. -----	Jan. 23, 1894	521,685	Thomson, E. -----	June 19, 1894

## 171. GENERATION.—125. PYRO-MAGNETO ELECTRIC CONNECTING DEVICES.

508,489	Scott, C. F. -----	Nov. 14, 1893
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## 171. GENERATION.—40. REGULATORS.

501,059	Elkins, W. H. -----	July 11, 1893	511,347	Marty, J. -----	Dec. 26, 1893
501,309	Wightman, M. J. and Lemp, H. -----	July 11, 1893	511,375	Thomson, E. -----	Dec. 26, 1893
501,532	Offrell, O. -----	July 18, 1893	511,523	Haskins, C. D. -----	Dec. 26, 1893
501,961	Richardson, C. H. -----	July 25, 1893	512,115	Jones, A. B. -----	Jan. 2, 1894
502,285	Elkins, W. H. -----	Aug. 1, 1893	512,227	Scribner, C. E. -----	Jan. 2, 1894
502,444	Moore, McF. D. -----	Aug. 1, 1893	512,397	Scribner, C. E. -----	Jan. 9, 1894
502,788	Thomson, E. -----	Aug. 8, 1893	513,062	Sperry and Mills -----	Jan. 16, 1894
503,453	Davidson, J. E. -----	Aug. 15, 1893	513,065	White, H. P. -----	Jan. 16, 1894
503,750	Richardson, C. M. -----	Aug. 22, 1893	513,350	Van Emon, B. C. -----	Jan. 23, 1894
504,216	Henry, J. C. -----	Aug. 29, 1893	513,626	Sturgeon, C. J. -----	Jan. 30, 1894
504,497	Lemp, H. -----	Sept. 5, 1893	514,030	Pretchard, F. E. -----	Feb. 6, 1894
505,207	Philbrich, O. P. -----	Sept. 19, 1893	514,077	Thelder, J. D. -----	Feb. 6, 1894
505,914	Elkins, W. H. -----	Oct. 3, 1893	514,078	Thelder, J. D. -----	Feb. 6, 1894
506,482	Elkins, W. H. -----	Oct. 10, 1893	514,504	Scribner, C. E. -----	Feb. 13, 1894
506,881	Keller, J. -----	Oct. 17, 1893	515,473	Higham, D. -----	Feb. 27, 1894
508,208	Cullingworth, A. M. -----	Nov. 7, 1893	516,204	Ihlder, J. D. -----	Mar. 13, 1894
508,493	Stanley, W., jr -----	Nov. 14, 1893	516,487	Haskins, C. D. -----	Mar. 13, 1894
508,658	Thomson, E. -----	Nov. 14, 1893	516,497	Lewis, I. N. -----	Mar. 13, 1894
508,486	Parshall, H. F. -----	Nov. 28, 1893	516,651	Hochhausen, W. -----	Mar. 20, 1894
509,475	Knight, W. H. -----	Nov. 28, 1893	516,818	Knight, W. H. -----	Mar. 20, 1894
509,499	Thomson, E. -----	Nov. 28, 1893	517,714	Winter, J. F. -----	Apr. 3, 1894
509,517	Edison, T. A. -----	Nov. 28, 1893	517,866	Keith, N. S. -----	Apr. 10, 1894
509,953	Scribner, C. E. -----	Dec. 5, 1893	518,062	Gale, H. B. -----	Apr. 10, 1894
509,954	Scribner, C. E. -----	Dec. 5, 1893	518,232	Elkins, W. H. -----	Apr. 17, 1894
509,955	Scribner, C. E. -----	Dec. 5, 1893	518,349	Müller, C. L. F. -----	Apr. 17, 1894
511,187	Barber, E. A. -----	Dec. 19, 1893	518,360	Waterhouse, A. G. -----	Apr. 17, 1894



## 171. GENERATION.—40. REGULATORS—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
518,906	Whittingham, G. H -----	Apr. 24, 1894	519,881	Willard, T. A -----	May 15, 1894
519,098	Schmid and Lamme -----	May 1, 1894	520,267	Miller, W. H -----	May 22, 1894
519,120	Herdman, F. E -----	May 1, 1894	520,280	Whittingham, G. H -----	May 22, 1894
519,858	Elkins, W. H -----	May 15, 1894	520,764	Bell, L -----	June 5, 1894

## 171. GENERATION.—119. REGULATORS—ALTERNATING.

505,505	Bell, L -----	Sept. 26, 1893	516,847	Thomson, E -----	Mar. 20, 1894
508,638	Rice, E. W. -----	Nov. 14, 1893	518,217	Bell, L -----	Apr. 17, 1894
508,657	Thomson, E -----	Nov. 14, 1893	519,335	Lemp, H -----	May 8, 1894
510,465	Bell, L -----	Dec. 12, 1893	521,666	Offrell, O -----	June 19, 1894
516,846	Thomson, E -----	Mar. 20, 1894			

## 171. GENERATION.—97. SYSTEMS OF DISTRIBUTION.

500,630	Thomson, E -----	July 4, 1893	513,425	Scott, C. F -----	Jan. 23, 1894
501,094	Nordmann, P -----	July 11, 1893	11,400	Stanley and Kelly ----- (Reis.)	Jan. 30, 1894
501,558	Cabot, J. A -----	July 18, 1893	514,168	Tesla, N -----	Feb. 6, 1894
502,682	Von Siemens, G. W -----	Aug. 1, 1893	514,228	Hunter, R. M -----	Feb. 6, 1894
503,321	Hunter, R. M -----	Aug. 15, 1893	516,836	Rice, E. W., jr -----	Mar. 20, 1894
503,621	Shallenberger, O. B -----	Aug. 22, 1893	518,359	Waterhouse, A. G -----	Apr. 17, 1894
503,622	Stanley, W., jr -----	Aug. 22, 1893	520,050	Hicks, T. H -----	May 22, 1894
505,928	Scott, C. F -----	Oct. 3, 1893	520,965	Lamme, B. G -----	June 5, 1894
507,391	Stanley, W. jr., and Kelly, J. F -----	Oct. 24, 1893	520,970	Scott, C. F -----	June 5, 1894
508,646	Thomson, E -----	Nov. 14, 1893	521,924	Wright, P -----	June 26, 1894

## 172. MOTIVE POWER.—9. CAR BRAKES.

507,589	McEvoy, J. H -----	Oct. 31, 1893	520,108	Fletcher, W. C -----	May 22, 1894
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## 172. MOTIVE POWER.—15. DENTAL INSTRUMENTS.

510,048	Prepes, O. H -----	Dec. 5, 1893	521,138	Crowders, W. A -----	June 5, 1894
510,484	Pfouts, L. S -----	Dec. 12, 1893			

## 172. MOTIVE POWER.—152. ELEVATORS.

506,169	Esmond, E. R -----	Oct. 3, 1893	515,281	Brown, G. A -----	Feb. 20, 1894
506,367	Hochhausen, W -----	Oct. 10, 1893	516,843	Spaulding, H. C -----	Mar. 20, 1894
509,397	Pratt, C. R -----	Nov. 28, 1893	516,956	Watson, R -----	Mar. 20, 1894
509,821	Perkins, F. B -----	Nov. 28, 1893	517,169	Roberts, J. K -----	Mar. 27, 1894
513,134	Otis, N. P -----	Jan. 23, 1894	11,408	Herdman, F. E ----- (Reis.)	Mar. 27, 1894
515,255	Shaw, A. J -----	Feb. 20, 1894	519,117	Herdman, F. E -----	May 1, 1894
515,256	Shaw, A. J -----	Feb. 20, 1894	520,794	Lutz, W. D -----	June 5, 1894

## 172. MOTIVE POWER.—36. MOTORS.

501,482	Parker, H. L. and Meston, A. W. -----	July 11, 1893	516,263	Conklin, O. F -----	Mar. 13, 1894
501,842	Long, M. W -----	July 18, 1893	516,524	Denison, J. F -----	Mar. 13, 1894
502,098	Jones, R. M -----	July 25, 1893	516,713	Waite, H. F -----	Mar. 20, 1894
503,213	McKay, H. S -----	Aug. 15, 1893	516,784	Wriest, P., jr -----	Mar. 20, 1894
505,594	Curtis, C. G -----	Sept. 26, 1893	516,840	Robinson, C -----	Mar. 20, 1894
506,481	Elieson, C. P -----	Oct. 10, 1893	516,917	Coleman, C. J -----	Mar. 20, 1894
508,129	Carstarphen, W. P -----	Nov. 7, 1893	517,105	Henderson, J. W -----	Mar. 27, 1894
508,633	Priest, E. D -----	Nov. 14, 1893	517,668	Still, W. J -----	Apr. 3, 1894
510,059	Beard, A. H -----	Dec. 5, 1893	517,669	Still, W. J -----	Apr. 3, 1894
510,466	Bennett, E. H -----	Dec. 12, 1893	517,858	Greenfield, E. T -----	Apr. 10, 1894
510,534	Gorges, J. H. T -----	Dec. 12, 1893	518,033	Henry, J. C -----	Apr. 10, 1894
510,596	Germann, J. G -----	Dec. 12, 1893	518,291	Thomson, E -----	Apr. 17, 1894
510,662	Winkler, C. F -----	Dec. 12, 1893	518,404	Henshaw, F. V -----	Apr. 17, 1894
511,196	Conklin, O. F -----	Dec. 19, 1893	518,561	Brown, H. P -----	Apr. 17, 1894
511,570	White, H. P -----	Dec. 26, 1893	520,782	Hinman, A -----	June 5, 1894
511,758	Crowders, W. A -----	Jan. 2, 1894	520,800	Offrell, O -----	June 5, 1894
513,745	Weller, F. A -----	Jan. 30, 1894	520,810	Thomson, E -----	June 5, 1894
515,488	Doriot, C -----	Feb. 27, 1894	521,651	Henry, J. C -----	June 19, 1894
515,755	Dunn, G. S -----	Mar. 6, 1894	521,799	Lee, J -----	June 26, 1894

## 172. MOTIVE POWER.—120. MOTORS—ALTERNATING.

No.	NAME.	DATE.	No.	NAME.	DATE.
503,183	Wessel, F. A.-----	Aug. 15, 1893	515,962	Kelly, J. F.-----	Mar. 6, 1894
504,630	Siemens, A.-----	Sept. 5, 1893	516,213	Lundell, R.-----	Mar. 13, 1894
505,859	Stanley, W. and Kelly, J. T.-----	Oct. 3, 1893	516,795	Bell, L.-----	Mar. 20, 1894
505,860	Stanley, W. and Kelly, J. T.-----	Oct. 3, 1893	516,796	Bell, L.-----	Mar. 20, 1894
507,658	Kelly and Chesney-----	Oct. 31, 1893	516,849	Thomson, E.-----	Mar. 20, 1894
508,188	Stanley, W., jr.-----	Nov. 7, 1893	518,310	Duncan, T.-----	Apr. 17, 1894
510,601	Hochhausen, W.-----	Dec. 12, 1893	518,738	Kelly and Chesney-----	Apr. 24, 1894
514,902	Bradley, C. S.-----	Feb. 20, 1894	518,739	Kelly, J. F.-----	Apr. 24, 1894
514,903	Bradley, C. S.-----	Feb. 20, 1894	519,272	Ries and Scott-----	May 1, 1894
514,904	Bradley, C. S.-----	Feb. 20, 1894	519,862	Lamme, B. G.-----	May 15, 1894
515,900	Brown, C. E. L.-----	Mar. 6, 1894	520,620	Stanley, W., jr.-----	May 29, 1894
515,977	Stanley, Kelly and Chesney-----	Mar. 6, 1894	520,763	Bell, L.-----	June 5, 1894

## 172. MOTIVE POWER.—179. MOTORS—HAND-OPERATING DEVICES.

503,279	Davis, H. P.-----	Aug. 15, 1893	516,834	Priest, E. D.-----	Mar. 20, 1894
503,568	Adams, A. D.-----	Aug. 22, 1893	517,582	Mackie, R.-----	Apr. 3, 1894
503,690	Wheeler, S. S.-----	Aug. 22, 1893	518,218	Bell, L.-----	Apr. 17, 1894
505,686	Warner, E. P.-----	Sept. 26, 1893	518,254	Knight, W. H.-----	Apr. 17, 1894
506,001	Coldren, W. P.-----	Oct. 3, 1893	518,345	Cooper, W.-----	Apr. 17, 1894
507,144	Lundell, R.-----	Oct. 24, 1893	518,603	Lange and Lamme-----	Apr. 24, 1894
507,547	Knight, A. P.-----	Oct. 31, 1893	519,116	Herdman, F. E.-----	May 1, 1894
508,322	Jones, W. N.-----	Nov. 7, 1893	519,121	Herdman, F. E.-----	May 1, 1894
509,279	Allen, H. A.-----	Nov. 21, 1893	519,122	Herdman, F. E.-----	May 1, 1894
509,322	Morgan, W. H.-----	Nov. 21, 1893	519,123	Herdman, F. E.-----	May 1, 1894
509,363	Clark, J. H.-----	Nov. 28, 1893	519,124	Herdman, F. E.-----	May 1, 1894
509,505	Weight and Kinsey-----	Nov. 28, 1893	519,715	Keller, E. E.-----	May 15, 1894
509,776	Sperry, E. A.-----	Nov. 28, 1894	520,072	McKee, A. G.-----	May 22, 1894
510,932	Perret, T. A.-----	Dec. 19, 1893	520,748	Bancroft, J. S.-----	May 29, 1894
511,157	Packard, W. D.-----	Dec. 19, 1893	520,784	Hopkins and Stebbins-----	June 5, 1894
515,374	Sperry, E. A.-----	Feb. 27, 1894	520,822	Davis, C. E.-----	June 5, 1894
516,831	Moore, J. W.-----	Mar. 20, 1894			

## 172. MOTIVE POWER.—126. MOTORS—RECIPROCATING.

507,449	Fils, H. P.-----	Oct. 24, 1893	509,705	Threlfall, R.-----	Nov. 28, 1893
507,629	Morgan, E. C.-----	Oct. 31, 1893	510,367	Roe, A. R.-----	Dec. 5, 1893
507,671	Boehlen, R.-----	Oct. 31, 1893	519,662	Carpenter, C. F.-----	May 8, 1894
507,946	Van Depoele, C. J., dec'd-----	Oct. 31, 1893	519,869	McKay, H. S.-----	May 15, 1894
508,050	Richardson, C. H.-----	Nov. 7, 1893	519,870	McKay, H. S.-----	May 15, 1894
508,262	Williams, G. H.-----	Nov. 7, 1893			

## 172. MOTIVE POWER.—8. STEERING AND PROPULSION.

507,522	Ayton, C. W.-----	Oct. 31, 1893	515,286	Dyer, F. L.-----	Feb. 20, 1894
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## 172. MOTIVE POWER.—83. TRANSMISSION OF POWER.

507,945	Van Depoele, C. J., dec'd-----	Oct. 31, 1893	514,586	Bradley, C. S.-----	Feb. 13, 1894
508,000	Davidson, J. C.-----	Nov. 7, 1893	514,933	Hunting, F. S.-----	Feb. 20, 1894
511,599	Tesla, N.-----	Dec. 26, 1893	515,885	Scott, C. F.-----	Mar. 6, 1894
511,560	Tesla, N.-----	Dec. 26, 1893	516,804	Fiske, J. P. B.-----	Mar. 20, 1894
511,915	Tesla, N.-----	Jan. 2, 1894	516,805	Fiske, J. P. B.-----	Mar. 20, 1894
513,349	Thomson and Rice-----	Jan. 23, 1894	519,377	Bradley, C. S.-----	May 8, 1894
513,370	Steinmetz, C. P.-----	Jan. 23, 1894	521,051	Scott, C. F.-----	June 5, 1894

## 173. CONDUCTORS.—13. CONDUCTORS.

502,083	McEvoy, E. J.-----	July 25, 1893	510,613	Reed, C. J.-----	Dec. 12, 1893
503,604	Kellogg, M. G.-----	Aug. 22, 1893	511,547	Randall, F. S.-----	Dec. 26, 1893
503,712	Banta, W. E.-----	Aug. 22, 1893	513,630	Beard, C.-----	Jan. 30, 1894
504,398	Marsh, J. W.-----	Sept. 5, 1893	513,982	Chick, H. F.-----	Feb. 6, 1894
504,397	Marsh, J. W.-----	Sept. 5, 1893	514,167	Tesla, N.-----	Feb. 6, 1894
506,311	Fessenden, R. A.-----	Oct. 10, 1893	514,460	Haywood, D. B.-----	Feb. 13, 1894
506,830	Requa, L. F.-----	Oct. 17, 1893	514,849	Guillaume, T.-----	Feb. 13, 1894
507,257	Brown, H. H.-----	Oct. 24, 1893	514,925	Guillaume, T.-----	Feb. 20, 1894
503,295	Fisher, H. W.-----	Nov. 7, 1893	515,822	Dewees, T. J.-----	Mar. 6, 1894
503,370	Connor, W. A.-----	Nov. 7, 1893	515,905	Dewees, T. J.-----	Mar. 6, 1894
509,603	Noll, A.-----	Nov. 28, 1893			

## 173. CONDUCTORS.—70. CONDUCTORS—UNDERGROUND.

No.	NAME.	DATE.	No.	NAME.	DATE.
501,445	Sayers, W. B.-----	July 11, 1893	516,161	Loe, T. C.-----	Mar. 6, 1894
508,613	Henry, J. C.-----	Nov. 14, 1893	519,171	Brooks, D.-----	May 1, 1894
515,087	Kleinsteinben and Kleinsteinben.	Feb. 20, 1894	521,125	Phillips, J. J. E.-----	June 5, 1894

## 173. CONDUCTORS.—14. CONNECTORS.

502,229	Goodman, E. W.-----	July 25, 1893	11,398	Sanche, H.----- (Reis.)	Jan. 2, 1894
503,101	Seaton, B. C.-----	Aug. 8, 1893	512,711	Keithly, H. K.-----	Jan. 16, 1894
503,101	Webb, H. L.-----	Aug. 15, 1893	513,777	Green, A.-----	Jan. 30, 1894
503,427	Kohl, A.-----	Aug. 15, 1893	514,714	Hoffmann and Brogan.-----	Feb. 13, 1894
507,403	Bell, C.-----	Oct. 24, 1893	515,478	Meyer, J.-----	Feb. 27, 1894
508,587	Trumbull, G. A.-----	Nov. 14, 1893	518,414	Meyer, J.-----	Apr. 17, 1894
510,898	Curtis, F. G.-----	Dec. 19, 1893	521,018	De Mott, J. Y.-----	June 5, 1894
11,397	Sanche, H.----- (Reis.)	Jan. 2, 1894	521,238	Herr, J.-----	June 12, 1894

## 173. CONDUCTORS.—28. INSULATORS.

502,614	Clark, E. H.-----	Aug. 1, 1893	515,448	Shomberg, R.-----	Feb. 27, 1894
503,384	Pawolouski, J.-----	Aug. 15, 1893	517,591	Robinson, M.-----	Apr. 3, 1894
503,549	McCarthy, L.-----	Aug. 15, 1893	517,634	Winslow, G. H.-----	Apr. 3, 1894
503,778	Trimble, W. D.-----	Aug. 22, 1893	518,301	Wirt, H. C.-----	Apr. 17, 1894
505,123	O'Neill, J. J.-----	Sept. 19, 1893	518,907	Wynman, H. B.-----	Apr. 24, 1894
505,215	Buffington, E. W.-----	Sept. 19, 1893	520,367	Locke, F. M.-----	May 22, 1894
505,912	Wurts, A.-----	Oct. 3, 1893	520,412	Conover, C. E.-----	May 29, 1894
506,002	Cousens, A. C.-----	Oct. 3, 1893	520,602	Luscomb, H. H.-----	May 29, 1894
511,611	Hammond, C. N.-----	Dec. 26, 1893	520,855	Lieb, C. A.-----	June 5, 1894
511,612	Hammond, C. N.-----	Dec. 26, 1893	522,175	Anderson, J. M.-----	June 26, 1894
513,564	Fuller, A. W.-----	Jan. 30, 1894			

## 173. CONDUCTORS.—31. LIGHTNING RODS.

508,068	Walch, G. T.-----				Nov. 7, 1893
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## 173. CONDUCTORS.—43. RHEOSTATS.

500,631	Thomson, E.-----	July 4, 1893	513,457	Davis, H. P.-----	Jan. 23, 1894
502,040	Hussey, C. A.-----	July 25, 1893	515,241	Lyons, J. B.-----	Feb. 20, 1894
502,340	Wood, J. J.-----	Aug. 1, 1893	515,254	Shaw, A. J.-----	Feb. 20, 1894
504,160	Herrick, A. B.-----	Aug. 29, 1893	515,280	Brown, G. A.-----	Feb. 20, 1894
505,911	Wurts, A.-----	Oct. 3, 1893	515,304	Shaw, A. J.-----	Feb. 20, 1894
506,092	Billbery, C. O. C.-----	Oct. 3, 1893	515,970	Ries, E. E.-----	Mar. 6, 1894
507,345	Wood, J. J.-----	Oct. 24, 1893	516,217	McNulta, H.-----	Mar. 13, 1894
511,259	Weller, F. A.-----	Dec. 19, 1893	517,770	Shaw, A. J.-----	Apr. 3, 1894
511,286	Benecke, A. O.-----	Dec. 19, 1893	518,236	Fiske, J. P. B.-----	Apr. 17, 1894
511,407	Carpenter, C. E.-----	Dec. 26, 1893	518,365	Dinkey, A. C.-----	Apr. 17, 1894
513,126	Meredith, W.-----	Jan. 23, 1894	521,843	Baker, B. E.-----	June 26, 1894

## 174. MEDICAL AND SURGICAL.—87. BATH.

517,862	Isaacs, J. A.-----				Apr. 10, 1894
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## 174. MEDICAL AND SURGICAL.—88. BODY-WEAR.

501,550	Wagner, H. C.-----	July 18, 1893	504,336	Enholm, W. C.-----	Sept. 5, 1893
501,849	Standish, B. H.-----	July 18, 1893	513,387	Fuller, W. C.-----	Jan. 23, 1894
501,861	Berliner, A. D.-----	July 18, 1893	516,740	King, G. R.-----	Mar. 20, 1894
502,753	Payne, W. H.-----	Aug. 8, 1893	518,894	Petterson, O. E.-----	Apr. 24, 1894
502,804	Andrus, D. P.-----	Aug. 8, 1893	521,594	Miles, E. M.-----	June 19, 1894

## 174. MEDICAL AND SURGICAL.—89. ELECTRODES.

500,681	Carruther, S. H.-----	July 4, 1893	520,206	Hinkley, C. S. W.-----	May 22, 1894
505,561	Smith, W. I.-----	Sept. 26, 1893	520,673	Farrar, W. B.-----	May 23, 1894
506,516	Lane, L.-----	Oct. 10, 1893			



## 174. MEDICAL AND SURGICAL.—177. ELECTRICITY.

No.	NAME.	DATE.	No.	NAME.	DATE.
506,449 507,298	Silsbee, S.----- Willinghaus, W.-----	Oct. 10, 1893 Oct. 24, 1893	521,800	Leech, G. A.-----	June 26, 1894

## 175. SPECIAL APPLICATIONS.—181. DEMAGNETIZING.

507,916	La Boiteaux, F. M.-----	Oct. 31, 1893
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## 175. SPECIAL APPLICATIONS.—21. ELECTRO-MAGNETS.

506,282 512,340 512,386	Timmis, I. A.----- Tesla, N.----- McBerty, F. R.-----	Oct. 10, 1893 Jan. 9, 1894 Jan. 9, 1894	518,092 521,269	Collier, A. T.----- Michl, W. R.-----	Apr. 10, 1894 June 12, 1894
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## 175. SPECIAL APPLICATIONS.—116. IGNITING DEVICES—MANUAL.

501,565 504,733 506,347 509,035 513,300	Görldt, G.----- Marshall, N.----- Strnble, C. B.----- Jenne and Willey----- Brown, W. L.-----	July 18, 1893 Sept. 12, 1893 Oct. 10, 1893 Nov. 21, 1893 Jan. 23, 1894	514,651 515,397 516,878 517,520 520,445	Graydon, A. J.----- Dahlgreen, J. O.----- Sachs, J.----- Graham and Chapmann----- Missell, D.-----	Feb. 13, 1894 Feb. 27, 1894 Mar. 20, 1894 Apr. 3, 1894 May 29, 1894
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## 175. SPECIAL APPLICATIONS.—115. IGNITING DEVICES—AUTOMATIC.

520,820	Carter, Dawson and Meyrick-----	June 5, 1894
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## 175. SPECIAL APPLICATIONS.—91. IGNITING DEVICES—PORTABLE.

521,516	Todd, A. H.-----	June 19, 1894
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## 176. ELECTRIC LIGHTING.—80. CUT-OUTS—ELECTRO-MAGNETIC.

502,518 504,933 508,652 510,646	Hoffmann, C. H.----- Herbert, N.----- Thomson, E.----- Mayhew, C. L.-----	Aug. 1, 1893 Sept. 12, 1893 Nov. 14, 1893 Dec. 12, 1893	511,873 513,250 515,109 521,423	Callender, R.----- Stewart, J. B.----- Callender, R.----- Stanley, L. T.-----	Jan. 2, 1894 Jan. 23, 1894 Feb. 20, 1894 June 12, 1894
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## 176. ELECTRIC LIGHTING.—79. CUT-OUTS—MECHANICAL.

501,191 502,300 502,519 502,826 503,180 503,867 506,297 507,150	Offrell, O.----- Kells, C. E., jr.----- Hoffmann, C. H.----- McCarthy, L.----- Warner, E. P.----- Matson, L. B.----- Alexander, W. W.----- Miller, L. W.-----	July 11, 1893 Aug. 1, 1893 Aug. 1, 1893 Aug. 8, 1893 Aug. 15, 1893 Aug. 22, 1893 Oct. 10, 1893 Oct. 24, 1893	511,889 512,774 518,231 518,813 519,077 519,338 520,279 520,474	Hinds, J. L.----- Warner, E. P.----- Ekstrom, A.----- Hill, W. S.----- Trumpy, J.----- McElroy, J. F.----- Werline, H. E.----- Ball, H. P.-----	Jan. 2, 1894 Jan. 16, 1894 Apr. 17, 1894 Apr. 24, 1894 May 1, 1894 May 8, 1894 May 22, 1894 May 29, 1894
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## 176. ELECTRIC LIGHTING.—154. CUT-OUTS—MECHANICAL—OSCILLATING SNAP.

501,068	Haskins, C. D -----	July 11, 1893	504,528	Herrick, A. B -----	Sept. 5, 1893
501,707	Dingle, W. H. and Urquhart, J. M. -----	July 13, 1893	506,563	Stevens, F -----	Oct. 10, 1893
			511,240	Hinds, J. L -----	Dec. 19, 1893
504,123	Dey, C. E -----	Aug. 29, 1893	517,773	Speed, Barker and Frank -----	Apr. 3, 1894
504,523	Gartside, C. W. and Wood, R. E. -----	Sept. 5, 1893	518,800	Woltmann, E -----	Apr. 24, 1894

## 176. ELECTRIC LIGHTING.—155. CUT-OUTS—MECHANICAL—ROTARY.

510,533 517,100	Gibbs, J. S.----- Gibbs, J. S.-----	Dec. 12, 1893 Mar. 27, 1894	518,188 11,395	Hersh, Woodward and Pettee-- Hart, G. W.----- (Reis.)-----	Apr. 10, 1894 Dec. 12, 1893
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## 176. ELECTRIC LIGHTING.—156. CUT-OUTS—MECHANICAL—SLIDING.

No.	NAME.	DATE.	No.	NAME.	DATE.
501,071	Höfer, C. F. W. -----	July 11, 1893	517,664	Reubel, E. -----	Apr. 3, 1894
501,206	Fiske, J. P. B. -----	July 11, 1893	517,957	MacCoy, A. T. -----	Apr. 10, 1894
512,614	Hinds, J. L. -----	Jan. 9, 1894	520,852	Knowles, E. R. -----	June 5, 1894

## 176. ELECTRIC LIGHTING.—78. CUT-OUTS—THERMAL.

500,601	Offrell, O. -----	July 4, 1893	508,665	Wirt, H. C. -----	Nov. 14, 1893
500,629	Thomson, E. -----	July 4, 1893	509,036	Johnson, E. H. -----	Nov. 21, 1893
500,918	Linton, G. E. -----	July 4, 1893	509,713	Adams, N. F. -----	Nov. 28, 1893
501,201	Wurts, A. -----	July 11, 1893	512,331	Seymour, A. P. -----	Jan. 9, 1894
502,330	Thomson, E. -----	Aug. 1, 1893	514,480	Lemp, H. -----	Feb. 13, 1894
502,465	Mehren, J. F. -----	Aug. 1, 1893	514,554	Jones, C. E. -----	Feb. 13, 1894
502,541	Thalaker, C. -----	Aug. 1, 1893	517,120	Lemp and Wightman -----	Mar. 27, 1894
504,334	Goodridge, W. M. -----	Sept. 5, 1893	520,378	Parson, E. A. -----	May 22, 1894
506,383	Thomson, E. -----	Oct. 10, 1893	520,772	Ekstrom, A. -----	June 5, 1894
508,644	Swan, A. -----	Nov. 14, 1893			

## 176. ELECTRIC LIGHTING.—105. LIGHTS—ARC, GRAVITY FEED, CLUTCH.

500,657	Hunter, R. M. -----	July 4, 1893	512,401	Scribner, C. E. -----	Jan. 9, 1894
501,170	Scribner, C. E. -----	July 11, 1893	512,667	Scribner, C. E. -----	Jan. 9, 1894
502,166	Barrett, P. J. -----	July 25, 1893	512,880	Hartley, C. J. -----	Jan. 16, 1894
502,471	Scribner, C. E. -----	Aug. 1, 1893	513,112	Jandus, W. -----	Jan. 23, 1894
502,535	Scribner, E. E. -----	Aug. 1, 1893	514,505	Scribner and Warner -----	Feb. 13, 1894
502,536	Scribner, C. E. -----	Aug. 1, 1893	514,506	Scribner, C. E. -----	Feb. 13, 1894
504,271	Hunter, R. M. -----	Aug. 29, 1893	515,205	Ford, B. -----	Feb. 20, 1894
505,233	Schmid, C. -----	Sept. 19, 1893	515,342	Kirkegaard, G. -----	Feb. 27, 1894
506,716	McNellies, C. -----	Oct. 17, 1893	518,654	Segerdahl, R. -----	Apr. 24, 1894
508,392	Adair and Kluver -----	Nov. 7, 1893	518,793	Scribner, C. E. -----	Apr. 24, 1894
509,014	Ball, H. P. -----	Nov. 21, 1893	519,045	McKeown, J. B. -----	May 1, 1894
509,168	Hunter, R. M. -----	Nov. 21, 1893	519,726	Mathiesen, W. -----	May 15, 1894
511,049	Homel, A. -----	Dec. 19, 1893	519,912	Kester, J. T. -----	May 15, 1894

## 176. ELECTRIC LIGHTING.—106. LIGHTS—ARC, GRAVITY FEED, GEAR-CLUTCH.

501,757	Bergmann, S. -----	July 18, 1893	511,495	Belfield, R. -----	Dec. 26, 1893
501,768	Dempster, J. T. -----	July 18, 1893	515,022	Rushmore, S. W. -----	Feb. 20, 1894
501,884	Klees, W. H. -----	July 18, 1893	515,850	Wood, J. J. -----	Mar. 6, 1894
502,983	McEvoy, J. H. -----	Aug. 8, 1893	516,574	McGahau, F. L. -----	Mar. 13, 1894
504,277	Phillips, W. A. -----	Aug. 29, 1893	516,822	Knowles, E. R. -----	Mar. 20, 1894
506,503	Hofmann, C. -----	Oct. 10, 1893	518,719	Hoffmann, C. -----	Apr. 24, 1894
507,916	Luce, W. B. -----	Oct. 31, 1893	520,996	Marks and Ransom -----	June 5, 1894
509,188	Ward, B. B. -----	Nov. 21, 1893	521,434	Edens and Brewer -----	June 12, 1894
509,842	Clark, E. P. -----	Nov. 28, 1893	521,798	Johnson, S. P. -----	June 26, 1894
510,605	Kester, J. F. -----	Dec. 12, 1893	521,877	Davy, W. J. -----	June 26, 1894

## 176. ELECTRIC LIGHTING.—111. LIGHTS—ARC, NON-FEEDING.

505,183	Atwater, A. S. -----	Sept. 19, 1893	512,482	Niewerth, R. -----	Jan. 9, 1894
512,473	Irving, F. K. -----	Jan. 9, 1894	513,921	Gutierrez and Thompson -----	Jan. 30, 1894
512,481	Niewerth, R. -----	Jan. 9, 1894			

## 176. ELECTRIC LIGHTING.—107. LIGHTS—ARC, POSITIVE FEED.

508,656	Thomson, E. -----	Nov. 14, 1893	514,583	Woolverton, J. E. -----	Feb. 13, 1894
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## 176. ELECTRIC LIGHTING.—109. LIGHTS—ARC, POSITIVE FEED, GEAR-CLUTCH.

501,074	Jergle, J. -----	July 11, 1893	514,139	Wagner, G. G. -----	Feb. 6, 1894
501,080	Kirkegaard, G. -----	July 11, 1893	514,229	Hunter, R. M. -----	Feb. 6, 1894
501,081	Kirkegaard, G. -----	July 11, 1893	516,825	Knowles and Parks -----	Mar. 20, 1894
502,948	Buchanan, L. H. -----	Aug. 8, 1893	519,283	Fyfe, J. C. -----	May 1, 1894
506,890	Utzing, A. -----	Oct. 17, 1893			



## 176. ELECTRIC LIGHTING.—107. LIGHTS—ARC, POSITIVE FEED, CLUTCH.

No.	NAME.	DATE.	No.	NAME.	DATE.
507,867	Willibrant, H -----	Oct. 31, 1893	515,125	Meissner, W. O.-----	Feb. 20, 1894

## 176. ELECTRIC LIGHTING.—180. CEILING BLOCK.

502,333	Voorhees, G. T -----	Aug. 1, 1893	509,501	Werline, H. E -----	Nov. 28, 1893
507,803	Goldkind and Stirn -----	Oct. 31, 1893	511,613	Hammond, C. N-----	Dec. 26, 1893
508,629	Offrell, O -----	Nov. 14, 1893	514,018	McEvoy, E. J -----	Feb. 6, 1894
509,500	Werline, H. E-----	Nov. 28, 1893			

## 176. ELECTRIC LIGHTING.—112. LIGHTS—ARC, SPECIAL FEATURES.

500,829	Turbayne, W. A -----	July 4, 1893	508,642	Rohrer, A. L-----	Nov. 14, 1893
501,758	Bergmann, S.-----	July 18, 1893	508,926	Federmann, P.-----	Nov. 21, 1893
501,911	Bergmann, S.-----	July 25, 1893	509,167	Hunter, R. M -----	Nov. 21, 1893
501,938	Hazelton, F. D -----	July 25, 1893	510,303	Thompson, L. E -----	Dec. 5, 1893
502,273	Bergmann, S.-----	Aug. 1, 1893	513,052	Ongley, C. E -----	Jan. 16, 1894
502,687	Weber, A -----	Aug. 1, 1893	514,057	Bergmann, S.-----	Feb. 6, 1894
503,538	Howard, L. E -----	Aug. 15, 1893	514,058	Bergmann, S.-----	Feb. 6, 1894
503,539	Howard, L. E -----	Aug. 15, 1893	516,826	Knowles, E. R -----	Mar. 20, 1894
503,799	Millard, W. W -----	Aug. 22, 1893	519,334	Lavens, E -----	May 8, 1894
504,760	Snedekor, C. T -----	Sept. 12, 1893	520,788	Knowles and Park-----	June 5, 1894
507,843	Wood, J. J -----	Oct. 24, 1893	521,362	Beseler, C -----	June 12, 1894
508,314	Hill, C. C -----	Nov. 7, 1893	521,936	Marks, L. B -----	June 26, 1894
508,623	Knowles, E. R-----	Nov. 14, 1893			

## 176. ELECTRIC LIGHTING.—102. LIGHTS—FILAMENTS AND CARBONS.

504,815	McManus, R -----	Sept. 12, 1893	506,650	Lacombe, J. M -----	Oct. 10, 1893
504,845	McManus, R -----	Sept. 12, 1893	511,459	Roberts, I. L -----	Dec. 26, 1893
506,459	Ball, R. E -----	Oct. 10, 1893	517,042	Heimann, S.-----	Mar. 27, 1894

## 176. ELECTRIC LIGHTING.—18. LIGHTS—INCANDESCENT.

500,670	Nickerson, W. E. and Cary, E. E.-----	July 4, 1893	507,554	Nickerson, W. E.-----	Oct. 31, 1893
500,671	Nickerson, W. E.-----	July 4, 1893	507,555	Nickerson, W. E.-----	Oct. 31, 1893
500,849	Burnett, H. D. and Doane, S. E.-----	July 4, 1893	507,556	Nickerson, W. E.-----	Oct. 31, 1893
501,021	McCarthy, L.-----	July 4, 1893	507,557	Nickerson, W. E.-----	Oct. 31, 1893
501,172	Thomson, E.-----	July 11, 1893	507,558	Nickerson, W. E.-----	Oct. 31, 1893
501,491	Cary, E. E.-----	July 18, 1893	507,978	Arnold, C. R -----	Nov. 7, 1893
501,529	Nickerson, W. E. and Cary, E. E.-----	July 18, 1893	508,659	Thomson, E -----	Nov. 14, 1893
501,530	Nickerson, W. E.-----	July 18, 1893	510,018	Green, H -----	Dec. 5, 1893
501,531	Nickerson, W. E.-----	July 18, 1893	511,229	Zobel, A -----	Dec. 19, 1893
502,322	Scharf, P -----	Aug. 1, 1893	512,320	Peil and McFadden-----	Jan. 9, 1894
503,108	Bates, J. H -----	Aug. 8, 1893	512,637	Turnbull, J. W -----	Jan. 9, 1894
503,650	Cary, E. E. and Nickerson, W. E.-----	Aug. 22, 1893	514,170	Tesla, N -----	Feb. 6, 1894
503,669	Cary, E. E. and Nickerson, W. E.-----	Aug. 22, 1893	514,739	Timbrell and Fyfe -----	Feb. 13, 1894
503,670	Cary, E. E. and Nickerson, W. E.-----	Aug. 22, 1893	515,465	Cottrell, H -----	Feb. 27, 1894
503,671	Cary, E. E. and Nickerson, W. E.-----	Aug. 22, 1893	516,689	Swan, G. C -----	Mar. 20, 1894
503,770	Nickerson, W. E.-----	Aug. 22, 1893	516,800	Burnett and Doane -----	Mar. 20, 1894
503,912	O'Neill, J. A -----	Aug. 22, 1893	516,892	Langhans, R -----	Mar. 20, 1894
505,913	Burnett, H. D. and Doane, S. E.-----	Oct. 3, 1893	517,017	Ashwell and Tuttle -----	Mar. 27, 1894
506,733	Berge, H. and F. G. A.-----	Oct. 17, 1893	517,069	Rockwell, F. C -----	Mar. 27, 1894
			517,432	Cary, A. C -----	Apr. 3, 1894
			518,179	Criggal, J. E -----	Apr. 10, 1894
			519,099	Smith, F. S -----	May 1, 1894
			520,088	Smith, F. S -----	May 22, 1894
			521,131	Voss, D. C -----	June 5, 1894

## 176. ELECTRIC LIGHTING.—113. LIGHTS—INCANDESCENT—SPECIAL FEATURES.

501,502	Gifford, A. T -----	July 18, 1893	508,344	Rivenburgh, A -----	Nov. 7, 1893
501,524	Morgan, W. G -----	July 18, 1893	508,482	Mayr, G -----	Nov. 14, 1893
503,693	Blasser, E -----	Aug. 22, 1893	510,317	Berry, C. M -----	Dec. 5, 1893
504,866	Davenport, F. W -----	Sept. 12, 1893	511,720	Angell and Porter -----	Dec. 26, 1893
506,034	Burtchaell, S. W -----	Oct. 3, 1893	513,112	Kelly, W. J -----	Jan. 23, 1894
507,364	Heiler, G. P -----	Oct. 24, 1893	513,113	Kelly, W. J -----	Jan. 23, 1894

## 176. ELECTRIC LIGHTING.—113. LIGHTS—INCANDESCENT—SPECIAL FEATURES—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
514,822	Gennert, E. F.-----	Feb. 13, 1894	518,198	McCanny and Root-----	Apr. 10, 1894
515,484	Stirn, L.-----	Feb. 27, 1894	518,713	Connell, W. H.-----	Apr. 24, 1894
515,716	Peeples, G.-----	Feb. 27, 1894	520,318	Knap, E. D.-----	May 22, 1894
516,824	Knowles, E. R.-----	Mar. 20, 1894	521,721	Mayr, G.-----	June 19, 1894
517,009	McLean, A.-----	Mar. 20, 1894	521,952	Faries, R.-----	June 26, 1894

## 176. ELECTRIC LIGHTING.—98. LIGHTS—SOCKETS AND KEYS.

501,205	Ekstrom, A.-----	July 11, 1893	515,485	Stirn, L.-----	Feb. 27, 1894
501,485	Ball, H. P.-----	July 18, 1893	515,606	Nourse, R. C.-----	Feb. 27, 1894
501,580	Sachs, G.-----	July 18, 1893	515,969	Ries, E. E.-----	Mar. 6, 1894
502,655	Bryant, W. C.-----	Aug. 1, 1893	515,971	Ries, E. E.-----	Mar. 6, 1894
503,349	Lee, C. T.-----	Aug. 15, 1893	516,484	Greengard, M. D.-----	Mar. 13, 1894
504,743	Perkins, C. G.-----	Sept. 12, 1893	516,819	Knowles, E. R.-----	Mar. 20, 1894
505,422	Gardner, J. M.-----	Sept. 19, 1893	516,820	Knowles, E. R.-----	Mar. 20, 1894
509,297	Bryant, W. C.-----	Nov. 21, 1893	516,844	Swan, A.-----	Mar. 20, 1894
512,448	Pfarr, T. L.-----	Jan. 9, 1894	521,322	Peek, L. R.-----	June 12, 1894
513,951	McFarlane and Edgar-----	Jan. 30, 1894	521,809	McLaughlin, J. F.-----	June 26, 1894

## 176. ELECTRIC LIGHTING.—19. SYSTEMS.

502,007	McCormick, A. L.-----	July 25, 1893	511,461	Rudd, C. H.-----	Dec. 26, 1893
502,702	Chesney, C. C.-----	Aug. 8, 1893	512,373	Handford, M.-----	Jan. 9, 1894
503,157	McNeil, W. and Tinder, J. H.-----	Aug. 15, 1893	513,006	Dobrowsky, M. Von Dolivo-----	Jan. 16, 1894
504,632	Spencer, T.-----	Sept. 5, 1893	514,580	Wilyoung, E. G.-----	Feb. 13, 1894
505,097	Flint, B. F.-----	Sept. 19, 1893	515,806	Wells, H. J.-----	Mar. 6, 1894
505,098	Flint, B. F.-----	Sept. 19, 1893	518,471	Smith, J. B.-----	Apr. 17, 1894
505,346	Bierley, H. A.-----	Sept. 19, 1893	519,849	Spencer, T.-----	May 15, 1894
505,808	Beland, T.-----	Oct. 3, 1893	520,128	Wood, J. J.-----	May 22, 1894
505,822	Egner, F.-----	Oct. 3, 1893	520,223	Schneider, G. L.-----	May 22, 1894
507,691	Robinson, M.-----	Oct. 31, 1893	520,263	Von Hefner, F.-----	May 22, 1894
508,616	Henry, J. C.-----	Nov. 14, 1893	521,867	Seaverns, E. B. V.-----	June 26, 1894
508,625	Knowles and Park-----	Nov. 14, 1893	521,908	Curry, J. H.-----	June 26, 1894
508,647	Thomson, E.-----	Nov. 14, 1893	521,925	Wright, P.-----	June 26, 1894
510,188	Pennoek, G. B.-----	Dec. 5, 1893			

## 176. ELECTRIC LIGHTING.—166. SYSTEMS—AUTOMATIC REGULATION.

501,095	Nordmann, P.-----	July 11, 1893	516,835	Rice, E. W. jr.-----	Mar. 20, 1894
505,241	Waterhouse, A. G.-----	Sept. 19, 1893	520,232	Higham, D.-----	May 22, 1894
510,260	Higham, D.-----	Dec. 5, 1893	521,436	Fay, T. J.-----	June 12, 1894
513,839	Talmadge, C. H.-----	Jan. 30, 1894			

## 176. ELECTRIC LIGHTING.—129. SYSTEMS—CAR.

504,681	Lewis, I. N.-----	Sept. 5, 1893	516,495	Lewis, I. N.-----	Mar. 13, 1894
505,351	Edwards, E. A.-----	Sept. 19, 1893	516,496	Lewis, I. N.-----	Mar. 13, 1894
506,223	Kinsman, F. E.-----	Oct. 10, 1893	517,498	Swarty, G. W.-----	Apr. 3, 1894
516,336	Miner, W. M.-----	Mar. 13, 1894	517,998	Biddle and Kennedy-----	Apr. 10, 1894

## 176. ELECTRIC LIGHTING.—167. SYSTEMS—HAND REGULATION.

501,173	Thum, F. A.-----	July 11, 1893	506,921	Mailloux, C. O. and Barston, W. S.-----	Oct. 17, 1893
502,104	Roe, A. R.-----	July 25, 1893			
502,105	Roe, A. R.-----	July 25, 1893	508,626	Knowles, E. R.-----	Nov. 14, 1893
502,272	Bentley, E. M.-----	Aug. 1, 1893	509,443	McGiffert, J. B.-----	Nov. 28, 1893
504,738	Mount, F. W.-----	Sept. 12, 1893	510,487	Rice, E. W., jr.-----	Dec. 12, 1893
506,920	Mailloux, C. O. and Barston, W. S.-----	Oct. 17, 1893			

## 176. ELECTRIC LIGHTING.—130. SYSTEMS—SECONDARY BATTERY.

508,559	Willard, T. A.-----	Nov. 14, 1893	516,379	Müller, H.-----	Mar. 13, 1894
511,821	Trumpy, J.-----	Jan. 2, 1894	516,498	Lewis, I. N.-----	Mar. 13, 1894
511,822	Trumpy, J.-----	Jan. 2, 1894	520,340	Schoop, P.-----	May 22, 1894

## 176. ELECTRIC LIGHTING.—131. SYSTEMS—TEST.

No.	NAME.	DATE.	No.	NAME.	DATE.
504,751	Rudd, C. H -----	Sept. 12, 1893	504,753	Rudd, C. H -----	Sept. 12, 1893
504,752	Rudd, C. H -----	Sept. 12, 1893			

## 177. ELECTRIC SIGNALING.—1. ALARMS.

500,822	Strauss, J. B -----	July 4, 1893	515,827	Hatch, C. A -----	Mar. 6, 1894
511,188	Barnard, G. L -----	Dec. 19, 1893	518,133	Blake, J. F -----	Apr. 10, 1894
511,866	Slaugerup, A. F -----	Jan. 2, 1894	518,481	Blake, J. F -----	Apr. 17, 1894
513,545	Ward, B. B -----	Jan. 30, 1894	519,382	Engel, H -----	May 8, 1894
514,697	Bradt, W. H -----	Feb. 13, 1894	520,351	Blake, J. F -----	May 22, 1894
514,775	Sanders, S. T -----	Feb. 13, 1894	521,976	Endeam, O. W. T -----	June 26, 1894
515,589	Kleinsteinuben and Kleinsteinuben	Feb. 27, 1894			

## 177. ELECTRIC SIGNALING.—2. ALARMS—BURGLAR.

501,306	Walker, W. J. and Bedford, A. L -----	July 11, 1893	514,202	Sauer and Hentyschel -----	Feb. 6, 1894
501,450	Stanley, L. T -----	July 11, 1893	514,584	Ahlens, R -----	Feb. 13, 1894
501,777	Fisher, C. J -----	July 18, 1893	516,239	Sturts, C. F. A -----	Mar. 13, 1894
502,325	Sparks, C. H -----	Aug. 1, 1893	516,240	Sturts, C. F. A -----	Mar. 13, 1894
507,869	Stovey, F. G -----	Oct. 31, 1893	516,771	Ritzmann, W -----	Mar. 20, 1894
514,019	McEvoy, E. J -----	Feb. 6, 1894	517,547	Gordon, M. T -----	Apr. 3, 1894
			11,423	Stromberg, A -----	June 26, 1894

## 177. ELECTRIC SIGNALING.—3. ANNUNCIATORS.

503,187	Young, J -----	Aug. 15, 1893	514,501	Scattergood, C. F -----	Feb. 13, 1894
509,956	Scribner, C. E -----	Dec. 5, 1893			

## 177. ELECTRIC SIGNALING.—139. ANNUNCIATORS—DROP.

506,883	Perrin, F. S -----	Oct. 17, 1893	513,956	Ross, F. W -----	Jan. 30, 1894
511,731	Doolittle, T. B -----	Dec. 26, 1893	515,665	English, J. W -----	Feb. 27, 1894
513,345	Strouse, L -----	Jan. 23, 1894	520,365	Lane and Perrin -----	May 22, 1894
513,592	McEvoy, J. H -----	Jan. 30, 1894	521,046	Ross, F. W -----	June 5, 1894
513,775	Garl, M -----	Jan. 30, 1894	521,144	Thompson, T. J -----	June 5, 1894

## 177. ELECTRIC SIGNALING.—157. ANNUNCIATORS—DROP SYSTEMS.

502,472	Spencer, T -----	Aug. 1, 1893	514,686	Rickey, I. E -----	Feb. 13, 1894
513,352	Vogt, A. L -----	Jan. 23, 1894	514,975	Watson, N. M -----	Feb. 20, 1894

## 177. ELECTRIC SIGNALING.—140. ANNUNCIATORS—STEP-BY-STEP.

501,185	Dunbar, F. W -----	July 11, 1893	518,037	Hunter, R. M -----	Apr. 10, 1894
505,819	Downs, H. T -----	Oct. 3, 1893	520,234	Kirnan, W. H -----	May 22, 1894
510,457	Whitehall and Whitehall -----	Dec. 12, 1893			

## 177. ELECTRIC SIGNALING.—158. ANNUNCIATORS—TIME.

512,217	Randall, P. M -----				Jan. 2, 1894
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## 177. ELECTRIC SIGNALING.—7. BELLS.

501,292	Newman, W. J -----	July 11, 1893	513,587	Meissner, W. O -----	Jan. 30, 1894
507,925	Patty, T. S -----	Oct. 31, 1893	513,593	McEvoy, J. H -----	Jan. 30, 1894
509,050	Schweiger, W. J -----	Nov. 21, 1893	514,212	Connolly, J. N -----	Feb. 6, 1894
509,545	McIntosh, G. M -----	Nov. 28, 1893	514,960	Orpen, W. H., jr -----	Feb. 20, 1894
511,451	Oehring, A. J -----	Dec. 26, 1893	516,025	Schuremann, D. S -----	Mar. 6, 1894
513,219	Turnbull, C., jr -----	Jan. 23, 1894	516,500	Martin, M -----	Mar. 13, 1894
513,220	Turnbull, C., jr -----	Jan. 23, 1894	517,450	Franc and Morden -----	Apr. 3, 1894



## 177. ELECTRIC SIGNALING.—26. INDICATORS.

No.	NAME.	DATE.	No.	NAME.	DATE.
502,315	Peirce, E. E -----	Aug. 1, 1893	518,885	Hollerith, H -----	Apr. 24, 1894
510,417	Fiske, B. A -----	Dec. 12, 1893	518,886	Hollerith, H -----	Apr. 24, 1894
518,604	Hollerith, H -----	Apr. 24, 1894			

## 177. ELECTRIC SIGNALING.—159. INDICATORS—STATION.

501,258	Sears, W -----	July 11, 1893	515,274	Beckman, H. C -----	Feb. 20, 1894
514,878	Barker, H. C -----	Feb. 13, 1894			

## 177. ELECTRIC SIGNALING.—38. RAILWAY.

501,701	Wilder, C. M -----	July 18, 1893	511,163	Sachs, J -----	Dec. 19, 1893
509,093	Paternal, T. H -----	Nov. 21, 1893	517,419	Leonard, M. B -----	Mar. 27, 1894
509,201	Crabtree, L. T -----	Nov. 21, 1893	520,926	Johnson, A. H -----	June 5, 1894
509,447	Pellat, J. S. H -----	Nov. 28, 1893			

## 177. ELECTRIC SIGNALING.—146. RAILWAY—BLOCK.

500,366	Riley and Selden -----	July 4, 1893	518,525	Hermann, E. E -----	Apr. 17, 1894
501,438	Potter, E. C -----	July 11, 1893	520,661	Selden and Riley -----	May 29, 1894
515,751	Dalton and Dalton -----	Mar. 6, 1894	520,710	Selden and Riley -----	May 29, 1894
516,597	Green, J. L -----	Mar. 13, 1894			

## 177. ELECTRIC SIGNALING.—147. RAILWAY—BLOCK SYSTEMS.

500,668	Mugnier, J. C. G -----	July 4, 1893	507,518	Leonard, M. B -----	Oct. 24, 1893
503,718	Frischen, J. H -----	Aug. 22, 1893	520,323	Lewis, W. F -----	May 22, 1894

## 177. ELECTRIC SIGNALING.—148. RAILWAY—CAB.

500,827	Thomas, G. L. and Seward, E. E -----				July 4, 1893
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## 177. ELECTRIC SIGNALING.—149. RAILWAY—CAB, SECTIONAL RAIL.

503,505	Timmis, I. A -----	Aug. 15, 1893	515,145	Cyepull, J. J -----	Feb. 20, 1894
503,981	Orme, J -----	Aug. 29, 1893	518,511	Rex, B. F -----	Apr. 17, 1894
504,022	Kinsman, F. E -----	Aug. 29, 1893	519,932	Strong and Reed -----	May 15, 1894
504,542	Seagrave, F. E -----	Sept. 5, 1893	519,938	Beattie, F -----	May 15, 1894
507,125	Herrick, A. B -----	Oct. 24, 1893	520,061	Kinsman, F. E -----	May 22, 1894
507,918	Miller, G. E -----	Oct. 31, 1893	520,520	Elkins, W. H -----	May 29, 1894
508,946	Karr and Bradrick -----	Nov. 21, 1893	521,553	Samuels, B -----	June 19, 1894
511,131	Espinso, J. O. Y -----	Dec. 19, 1893			

## 177. ELECTRIC SIGNALING.—150. RAILWAY—SECTIONAL RAIL.

501,183	Daves, W -----	July 11, 1893	514,566	O'Sullivan, M. J -----	Feb. 13, 1894
502,626	Lattig, J. W -----	Aug. 1, 1893	515,638	Wilson, A. G -----	Feb. 27, 1894
503,100	Seaton, B. C -----	Aug. 8, 1893	515,648	Breese, C. P -----	Feb. 27, 1894
505,833	Kinsman, F. E -----	Oct. 3, 1893	516,558	Taylor, J. D -----	Mar. 13, 1894
509,244	Parrish, H. A -----	Nov. 21, 1893	516,806	Gibboney, J. W -----	Mar. 20, 1894
510,603	Johnson, A. H -----	Dec. 12, 1893	516,903	Taylor, J. D -----	Mar. 20, 1894
512,050	McBrien, F -----	Jan. 2, 1894	520,062	Kinsman, F. E -----	May 22, 1894
512,051	McBrien, F -----	Jan. 2, 1894	521,412	Johnson, L. F -----	June 12, 1894
512,077	Wayland, J -----	Jan. 2, 1894	521,435	Farmer, J. R -----	June 12, 1894
512,754	Selden, C -----	Jan. 16, 1894			

## 177. ELECTRIC SIGNALING.—151. RAILWAY—TRACK INSTRUMENTS.

502,827	Lattig, J. W -----	Aug. 1, 1893	516,598	Green, J. L -----	Mar. 13, 1894
513,498	Frischen and Pfeil -----	Jan. 30, 1894	521,455	Alsop, C. R -----	June 19, 1894
516,596	Green, J. L -----	Mar. 13, 1894			

## 177. ELECTRIC SIGNALING.—39. RECORDERS.

No.	NAME.	DATE.	No.	NAME.	DATE.
504,741	Patterson, W. R -----	Sept. 12, 1893	513,364	Kahn, L -----	Jan. 23, 1894
509,171	Kirnan, W. H -----	Nov. 21, 1893	521,422	Smith, W. F -----	June 12, 1894
509,217	Gaynor, T. F -----	Nov. 21, 1893			

## 178. TELEGRAPHY.—46. AUTOMATIC.

506,275	Sheehy, R. J -----	Oct. 10, 1893	510,929	Parker and Summers -----	Dec. 19, 1893
507,791	Delany, P. B -----	Oct. 31, 1893	511,031	Hunter, R. M -----	Dec. 19, 1893
510,005	Delany, P. B -----	Dec. 5, 1893	516,552	Parker and Summers -----	Mar. 13, 1894
510,006	Delany, P. B -----	Dec. 5, 1893			

## 178. TELEGRAPHY.—10. CIRCUIT CLOSERS.

501,270	Fitzgerald, P. J -----	July 11, 1893	510,663	Wollensack, J. F -----	Dec. 12, 1893
504,148	Berrigan, W. H -----	Aug. 29, 1893	511,953	Hunking, C. D -----	Jan. 2, 1894
504,745	Piggins, C. R -----	Sept. 12, 1893	513,796	Lewers, H -----	Jan. 30, 1894
506,729	Rex, B. F -----	Oct. 17, 1893	517,401	Allen, C. E -----	Mar. 27, 1894
507,660	Krastin, A -----	Oct. 31, 1893	517,402	Allen, C. E -----	Mar. 27, 1894
509,539	Klein, C. J -----	Nov. 28, 1893	518,613	Lecellier, L. R -----	Apr. 24, 1894
509,985	Weyrick, O -----	Dec. 5, 1893	521,239	Hoopes, C. R -----	June 12, 1894
510,540	Hunter, R. M -----	Dec. 12, 1893	521,808	McLaughlin, J. F -----	June 26, 1894

## 178. TELEGRAPHY.—128. CIRCUIT CLOSERS—THERMAL.

502,734	Ludlow, S. W -----	Aug. 8, 1893	516,043	Barney, E -----	Mar. 6, 1894
502,749	Oehring, A. J -----	Aug. 8, 1893	516,708	McCordy, C. A -----	Mar. 20, 1894
504,002	Turad, L. J -----	Aug. 29, 1893	517,502	Weaver, J -----	Apr. 3, 1894
505,834	Kinsman, F. E -----	Oct. 3, 1893	519,497	Dunish, A -----	May 8, 1894
510,115	Cantrell, M. C -----	Dec. 5, 1893	519,634	Kloss, E -----	May 8, 1894
512,672	Egan, S. E -----	Jan. 9, 1894	522,022	Maxim, H. F -----	June 26, 1894
513,829	Schureman, D. S -----	Jan. 30, 1894	522,055	Hall, D. F -----	June 26, 1894

## 178. TELEGRAPHY.—45. CIRCUITS AND SYSTEMS.

504,367	Rudd, C. H -----	Sept. 5, 1893	510,612	Reed, C. J -----	Dec. 12, 1893
510,002	Delany, P. B -----	Dec. 5, 1893	509,290	Boughton, C. V -----	Nov. 21, 1893
510,003	Delany, P. B -----	Dec. 5, 1893	512,214	Pickernell, F. A -----	Jan. 2, 1894
510,004	Delany, P. B -----	Dec. 5, 1893	518,788	Mehren, J. F -----	Apr. 24, 1894
510,007	Delany, P. B -----	Dec. 5, 1893	519,346	Pupin, M. S -----	May 8, 1894
510,508	Holman, S. W -----	Dec. 12, 1893	519,347	Pupin, M. S -----	May 8, 1894
510,430	Kirke, W. R -----	Dec. 12, 1893			

## 178. TELEGRAPHY.—12. CONDENSERS.

503,186	Wurts, A -----				Aug. 15, 1893
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## 178. TELEGRAPHY.—48. DUPLEX.

510,209	Thorn, C., jr -----	Dec. 5, 1893	512,872	Edison, T. A -----	Jan. 16, 1894
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## 178. TELEGRAPHY.—103. FIRE—ALARMS AND EXTINGUISHERS.

501,519	Lorrain, J. G -----	July 18, 1893	506,841	Bulen, G. F -----	Oct. 17, 1893
506,700	Kiehe, J. S -----	Oct. 17, 1893	520,547	Thumhorst, F. J -----	May 29, 1894

## 178. TELEGRAPHY.—50. FIRE.

501,631	Smith, J. E -----	July 18, 1893	512,400	Scribner, C. E -----	Jan. 9, 1894
501,653	Harvard, J -----	July 18, 1893	513,526	O'Sullivan, M. J -----	Jan. 30, 1894
501,703	Doane, F. H -----	July 18, 1893	514,279	Sacks, J -----	Feb. 6, 1894
502,207	Sachs, J -----	July 25, 1893	515,503	Sacks, J -----	Feb. 27, 1894
503,563	Christie, S. E -----	Nov. 14, 1893	515,761	Gaynor, T. F -----	Mar. 6, 1894
511,599	Eglin, W -----	Dec. 26, 1893			

## 178. TELEGRAPHY.—160. FIRE—AUTOMATIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
501,905	Bernhardt, C.-----	July 18, 1893	506,582	Brown, G. W.-----	Oct. 10, 1893
502,889	Palmer, F. S.-----	Aug. 8, 1893	507,322	Holmes, A. R.-----	Oct. 24, 1893
504,196	Bradley, J. L.-----	Aug. 29, 1893	511,462	Rudd, C. H.-----	Dec. 26, 1893
504,980	Hall, C. K. and Lillard, W. B.-----	Sept. 12, 1893	519,213	Werner and Werner-----	May 1, 1894

## 178. TELEGRAPHY.—162. FIRE—ENGINE HOUSE APPARATUS.

502,487	Drake, C. C.-----	Aug. 1, 1893	509,116	Callahan, F.-----	Nov. 21, 1893
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## 178. TELEGRAPHY.—163. FIRE—NON-INTERFERING.

509,219	Gaynor, T. F.-----	Nov. 21, 1893	518,722	Kirnan, W. H.-----	Apr. 24, 1894
509,573	Gardiner, J. M.-----	Nov. 28, 1893			

## 178. TELEGRAPHY.—165. FIRE—REPEATERS.

509,216	Gaynor, T. F.-----				Nov. 21, 1893
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## 178. TELEGRAPHY.—164. FIRE—VARIABLE SIGNAL.

509,218	Gaynor, T. F.-----	Nov. 21, 1893	515,762	Gaynor, T. F.-----	Mar. 6, 1894
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## 178. TELEGRAPHY.—161. FIRE—VARIABLE SIGNAL—DIAL.

500,563	Decrow, W. E.-----	July 4, 1893	515,110	Callender, R.-----	Feb. 20, 1894
503,709	Schwencke, C.-----	Aug. 22, 1893	516,641	Burns, M. J.-----	Mar. 20, 1894
509,824	Gill, J. B.-----	Nov. 28, 1893	520,127	Walter, H. E.-----	May 22, 1894
509,873	Burns, M. J.-----	Dec. 5, 1893	521,183	Rolfe, C. A.-----	June 12, 1894
514,128	Noyes and Winterhalden-----	Feb. 6, 1894			

## 178. TELEGRAPHY.—29. KEYS.

503,371	Neil, A.-----	Aug. 15, 1893	509,964	Steiner, J.-----	Dec. 5, 1893
508,214	Frank, J. R.-----	Nov. 7, 1893	511,787	Moss, H. E.-----	Jan. 2, 1894

## 178. TELEGRAPHY.—30. LIGHTNING ARRESTERS.

500,726	Van Nuis, C. S.-----	July 4, 1893	508,648	Thomson, E.-----	Nov. 14, 1893
500,828	Turbayne, W. A.-----	July 4, 1893	508,649	Thomson, E.-----	Nov. 14, 1893
501,114	Thomson, E.-----	July 11, 1893	509,783	Wurts, A.-----	Nov. 28, 1893
501,241	Browne, J. E.-----	July 11, 1893	509,784	Wurts, A.-----	Nov. 28, 1893
503,788	Emmet, W. Le R.-----	Aug. 22, 1893	520,776	Gibboney, J. W.-----	June 5, 1894
508,632	Potter, W. B.-----	Nov. 14, 1893	520,809	Thomson, E.-----	June 5, 1894

## 178. TELEGRAPHY.—35. MORSE REGISTERS.

503,372	Heil, A.-----				Aug. 15, 1893
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## 178. TELEGRAPHY.—52. PERFORATING.

513,612	Alteneck, F. Von Hefner-----				Jan. 30, 1894
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## 178. TELEGRAPHY.—54. PRINTING.

506,208	Davis, J. A. and Fowden, R. A.-----	Oct. 10, 1893	506,272	Sheehy, R. J.-----	Oct. 10, 1893
506,209	Davis, J. A. and Fowden, R. A.-----	Oct. 10, 1893	506,273	Sheehy, R. J.-----	Oct. 10, 1893
506,269	Sheehy, R. J.-----	Oct. 10, 1893	506,973	Buck, L. P. and Sweeten, F. D.-----	Oct. 17, 1893
506,270	Sheehy, R. J.-----	Oct. 10, 1893	509,066	Wooten, J. P.-----	Nov. 21, 1893
506,271	Sheehy, R. J.-----	Oct. 10, 1893	521,550	Pope, E.-----	June 19, 1894

## 178. TELEGRAPHY.—141. PRINTING—MULTIPLE WHEEL.

No.	NAME.	DATE.	No.	NAME.	DATE.
504,734	Linville, S. R. and Hettmansperger, L. F.	Sept. 12, 1893	506,274 512,422	Sheehy, R. J ----- Wirshing, E. A -----	Oct. 10, 1893 Jan. 9, 1894

## 178. TELEGRAPHY.—142. PRINTING—WHEEL.

509,430	Fowden, R. A -----	Nov. 28, 1893	521,170	Kleber, O. L -----	June 12, 1894
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## 178. TELEGRAPHY.—56. RAILWAY CAR.

507,170	Rupel, J. M -----				Oct. 24, 1893
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## 178. TELEGRAPHY.—63. REED.

503,590	Field, S. D -----				Aug. 22, 1893
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## 178. TELEGRAPHY.—41. RELAYS AND SOUNDERS.

502,449	Verley, H. S. L -----	Aug. 1, 1893	511,244	Medina, F. B -----	Dec. 19, 1893
510,156	Burry, J -----	Dec. 5, 1893	512,656	Locke, F. M -----	Jan. 9, 1894
511,005	Weston, E -----	Dec. 19, 1893	519,142	Verley, H. S. L -----	May 1, 1894

## 178. TELEGRAPHY.—42. REPEATERS.

514,845	Sloan, W. E -----				Mar. 6, 1894
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## 178. TELEGRAPHY.—69. TRANSMITTERS.

506,294	Willoughby, C -----	Oct. 10, 1893	511,234	Conrad, A. F -----	Dec. 19, 1893
511,172	Stinde, M. E -----	Dec. 19, 1893	515,709	Houck and Browning -----	Feb. 27, 1894

## 179. TELEPHONY.—82. ANTI-INDUCTION DEVICES.

506,884	Pickernell, F. A -----				Oct. 17, 1893
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## 179. TELEPHONY.—81. CONDUCTORS—ANTI-INDUCTIVE.

513,482	Chick, H. F -----				Jan. 30, 1894
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## 179. TELEPHONY.—57. TELEPHONES—CALLS.

509,680	Rabbidge, P -----				Nov. 28, 1893
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## 179. TELEPHONY.—143. TELEPHONES—CALLS—REED.

517,299	Rice and Williams -----				Mar. 27, 1894
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## 179. TELEPHONY.—144. TELEPHONES—CALLS—STEP-BY-STEP.

507,147	Mackie, R -----	Oct. 24, 1893	511,739	McNalley, J. J -----	Dec. 26, 1893
507,148	Mackie, R -----	Oct. 24, 1893	514,461	Hey, G. W -----	Feb. 13, 1894
507,205	Bogart, S. S -----	Oct. 24, 1893	514,462	Hey, G. W -----	Feb. 13, 1894
507,206	Bogart, S. S -----	Oct. 24, 1893	520,427	Hey, G. W -----	May 29, 1894



## 179. TELEPHONY.—58. TELEPHONES—DETAILS.

No.	NAME.	DATE.	No.	NAME.	DATE.
506,646	Dorenwend, C. H -----	Oct. 10, 1893	514,913	Cook, V. A -----	Feb. 20, 1894
509,867	Brady, C. G -----	Dec. 5, 1893	516,982	White, A. C -----	Mar. 20, 1894
510,320	Boardman, A. T -----	Dec. 5, 1893	520,786	Kinisiburgh, C. W -----	June 5, 1894
511,883	Dupern, A. R -----	Jan. 2, 1894			

## 179. TELEPHONY.—59. TELEPHONES—ELECTRIC.

504,454	Parks, W -----	Sept. 5, 1893	513,730	Richards, F. H -----	Jan. 30, 1894
504,801	Brown, J. A -----	Sept. 12, 1893	514,695	Bloomer, C. T -----	Feb. 13, 1894
506,415	Capek, J. V -----	Oct. 10, 1893	514,916	Drawbaugh, D -----	Feb. 20, 1894
506,627	Cousens, A. C -----	Oct. 10, 1893	517,564	Deckert, W -----	Apr. 3, 1894
507,715	Mason, J. H -----	Oct. 31, 1893	518,142	Goodman and Goodman -----	Apr. 10, 1894
511,456	Rabbidge, P -----	Dec. 26, 1893	518,742	Lockwood, W. C -----	Apr. 24, 1894
511,882	Drew, S. C -----	Jan. 2, 1894	520,086	Slocum, H. F -----	May 22, 1894
513,305	Colvin, F. R -----	Jan. 23, 1894	520,106	Cox, H. B -----	May 22, 1894
513,720	Page, H. S -----	Jan. 30, 1894	520,306	Goodman and Goodman -----	May 22, 1894

## 179. TELEPHONY.—184. TELEPHONES—GRANULAR.

518,263	Milde, C -----	Apr. 17, 1894	521,325	Smith, J. B -----	June 12, 1894
521,220	Richards, W. L -----	June 12, 1894			

## 179. TELEPHONY.—60. TELEPHONES—MAGNETIC.

501,610	Brown, J. A -----	July 18, 1893	516,642	Burns, M. J -----	Mar. 20, 1894
504,636	Stromberg, A. and Carlson, A. -----	Sept. 5, 1893	516,643	Burns, M. J -----	Mar. 20, 1894
505,087	Booth, J.B.S. and Falconer, E. J -----	Sept. 19, 1893	517,763	McKelvey, S. D -----	Apr. 3, 1894
506,305	Brown, J. A -----	Oct. 10, 1893	517,764	McKelvey, S. D -----	Apr. 3, 1894
507,728	Field, S. D -----	Oct. 31, 1893	518,959	Kolbassieff, E. V -----	May 1, 1894
511,118	Brown, J. A -----	Dec. 19, 1893	520,406	Boardman, A. F -----	May 29, 1894
511,358	Pickering, B -----	Dec. 26, 1893	521,188	Stromberg and Carlson -----	June 12, 1894
515,797	Selden, C -----	Mar. 6, 1894			

## 179. TELEPHONY.—185 TELEPHONES—MULTIPLE ELECTRODE.

513,181	Gröper, A -----	Jan. 23, 1894	514,920	Fitzsimmons, P -----	Feb. 20, 1894
513,729	Richards, F. H -----	Jan. 30, 1894	518,916	Cottrell, H -----	Apr. 24, 1894

## 179. TELEPHONY.—100. TELEPHONES—SUPPORTS.

501,405	Burchell, N. L. and Nevins, B. L., jr. -----	July 11, 1893	509,061	Weber and Weber -----	Nov. 21, 1893
502,398	Flanders, B. S -----	Aug. 1, 1893	517,762	McKelvey, S. D -----	Apr. 3, 1894
506,223	Gold, J. S -----	Oct. 10, 1893	520,467	Weber, W -----	May 29, 1894

## 179. TELEPHONY.—85. TELEPHONES—SWITCH-BOARDS.

501,859	Bell, O. A -----	July 18, 1893	507,424	Ford, W. S. and Lenfest, A. -----	Oct. 24, 1893
503,555	Scribner, C. E -----	Aug. 15, 1893	512,805	Childs, W. A -----	Jan. 16, 1894
504,462	Balsley, W. A -----	Sept. 5, 1893	521,461	Fisk, H. M -----	June 19, 1894
505,798	Bell, O. A -----	Sept. 26, 1893			

## 179. TELEPHONY.—71. TELEPHONES—SWITCHES.

501,168	Scribner, C. E -----	July 11, 1893	516,777	Stromberg and Carlson -----	Mar. 20, 1894
505,170	Ness, T. W -----	Sept. 19, 1893	517,263	Colvin, F. R -----	Mar. 27, 1894
509,484	O'Connell, J. J -----	Nov. 28, 1893	521,274	Smith, J. B -----	June 12, 1894
509,530	Harrison, W. S -----	Nov. 28, 1893	521,514	Stromberg and Carlson -----	June 19, 1894
513,960	Wheat, A. C -----	Jan. 30, 1894			



## 179. TELEPHONY.—64. TELEPHONES—SYSTEMS.

No.	NAME.	DATE.	No.	NAME.	DATE.
500,545	Anders, G. L. -----	July 4, 1893	505,628	Marshall, W. -----	Sept. 26, 1893
501,102	Pickernell, F. A. -----	July 11, 1893	505,730	Spencer, T. -----	Sept. 26, 1893
501,169	Scribner, C. E. -----	July 11, 1893	507,568	Stone, J. S. -----	Oct. 31, 1893
501,472	Spencer, T. -----	July 11, 1893	508,255	Stone, J. S. -----	Nov. 7, 1893
502,091	Colvin, F. R. -----	July 25, 1893	509,965	Stone, J. S. -----	Dec. 5, 1893
502,262	Patterson, W. R. -----	July 25, 1893	511,589	Colvin, F. R. -----	Dec. 26, 1893
502,768	Scribner, C. E. -----	Aug. 8, 1893	512,398	Scribner, C. E. -----	Jan. 9, 1894
502,769	Scribner, C. E. -----	Aug. 8, 1893	514,823	Gillette, W. -----	Feb. 13, 1894
503,099	Scribner, C. E. -----	Aug. 8, 1893	514,980	Wilson, D. H. -----	Feb. 20, 1894
503,115	Allison, W. D. -----	Aug. 15, 1893	517,243	Sabin and Hampton -----	Mar. 27, 1894
504,103	Colvin, F. R. -----	Aug. 29, 1893	518,334	Sabin and Hampton -----	Apr. 17, 1894
504,249	Scribner, C. E. -----	Aug. 29, 1893	518,367	Jacques, W. W. -----	Apr. 17, 1894
504,250	Scribner, C. E. -----	Aug. 29, 1893	518,392	Carty, J. J. -----	Apr. 17, 1894
504,251	Scribner, C. E. -----	Aug. 29, 1893	518,773	Balsley, W. H. -----	Apr. 24, 1894
504,845	Goodridge, W. M. -----	Sept. 5, 1893	519,876	Scribner, C. E. -----	May 15, 1894
505,188	Carty, J. J. -----	Sept. 19, 1893			

## 179. TELEPHONY.—101. TELEPHONES—SYSTEMS, AUTOMATIC.

502,475	Stevens, G. W. -----	Aug. 1, 1893	511,875	Callender, R. -----	Jan. 2, 1894
510,195	Serdniko, J. -----	Dec. 5, 1893	515,108	Callender, R. -----	Feb. 20, 1894
511,874	Callender, R. -----	Jan. 2, 1894	520,246	Simoneau, L. E. -----	May 22, 1894

## 179. TELEPHONY.—187. TELEPHONES—SYSTEMS, HOUSE.

516,506	McConbray, T. -----				Mar. 13, 1894
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## 179. TELEPHONY.—135. TELEPHONES—SYSTEMS, MULTIPLE SWITCH-BOARD.

502,770	Scribner, C. E. -----	Aug. 8, 1893	502,775	Scribner, C. E. -----	Aug. 8, 1893
502,771	Scribner, C. E. -----	Aug. 8, 1893	511,276	Pickernell, F. A. -----	Dec. 19, 1893
502,772	Scribner, C. E. -----	Aug. 8, 1893	516,862	Frost, E. F. -----	Mar. 20, 1894
502,773	Scribner, C. E. -----	Aug. 8, 1893	521,303	Wotton, J. A. -----	June 12, 1894
502,774	Scribner, C. E. -----	Aug. 8, 1893			

## 179. TELEPHONY.—137. TELEPHONES—SYSTEMS, MULTIPLE SWITCH-BOARD, TEST.

501,847	Scribner, C. E. -----	July 18, 1893	511,464	Scribner, C. E. -----	Dec. 26, 1893
506,658	Beithon, L. A. -----	Oct. 17, 1893	512,399	Scribner, C. E. -----	Jan. 9, 1894
508,054	Scribner, C. E. -----	Nov. 7, 1893	515,939	Pope, E. -----	Mar. 6, 1894
509,186	Scribner, C. E. -----	Nov. 21, 1893	515,940	Pope, E. -----	Mar. 6, 1894
509,367	Dunbar and Dunbar -----	Nov. 28, 1893	518,331	Sabin and Hampton -----	Apr. 17, 1894
509,932	McBerty, F. R. -----	Dec. 5, 1893	520,543	Scribner, C. E. -----	May 29, 1894
510,863	Jacques, W. W. -----	Dec. 12, 1893			

## 179. TELEPHONY.—136. TELEPHONES—SYSTEMS, MULTIPLE SWITCH-BOARD, DIVIDED CENTRAL.

502,466	McQuarrie, J. L. -----	Aug. 1, 1893	513,537	Scribner, C. E. -----	Jan. 30, 1894
502,660	Dunbar, F. W. -----	Aug. 1, 1893	515,531	O'Connell, J. J. -----	Feb. 27, 1894
503,252	Pickernell, F. A. -----	Aug. 15, 1893	518,332	Sabin and Hampton -----	Apr. 17, 1894
507,983	Bell, O. A. -----	Nov. 7, 1893	518,333	Sabin and Hampton -----	Apr. 17, 1894
509,477	May, E. S. C. -----	Nov. 28, 1893	520,083	Sabin and Hampton -----	May 22, 1894

## 179. TELEPHONY.—186. TELEPHONES—SYSTEMS, CENTRAL.

507,694	Stone, J. S. -----				Oct. 31, 1893
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## 179. TELEPHONY.—133. TELEPHONES—SYSTEMS, DIVIDED CENTRAL.

501,085	Larned, S. J. and Pickernell, F. A. -----	July 11, 1893	501,087	Lockwood, T. D. and Larned, S. J. -----	July 11, 1893
501,086	Larned, S. J. and Pickernell, F. A. -----	July 11, 1893			

## 191. ELECTRIC RAILWAYS.—1. CONDUCTOR SUPPORTS AND INSULATORS.

No.	NAME.	DATE.	No.	NAME.	DATE.
501,481	Meston, A. W. -----	July 11, 1893	513,426	Short, S. H. -----	Jan. 23, 1894
502,088	Wetmore, E. P. -----	July 25, 1893	513,950	McCarthy, L. -----	Jan. 30, 1894
502,677	McCarthy, L. -----	Aug. 1, 1893	514,221	Gray, L. B. -----	Feb. 6, 1894
503,039	Essicks, W. B. -----	Aug. 8, 1893	514,932	Hunter, R. M. -----	Feb. 20, 1894
503,519	Bennett, D. T. -----	Aug. 15, 1893	515,779	Lipscomb, H. H. -----	Mar. 6, 1894
503,749	McCarthy, L. -----	Aug. 22, 1893	515,907	Forbus, G. -----	Mar. 6, 1894
504,276	Nelson, J. -----	Aug. 29, 1893	517,621	McCarthy, L. -----	Apr. 3, 1894
505,457	Gibbs, L. T. -----	Sept. 26, 1893	518,071	McCarthy, L. -----	Apr. 10, 1894
507,299	Williams, M. S. -----	Oct. 24, 1893	518,213	Ball, H. P. -----	Apr. 17, 1894
509,328	Ricke, G. H. -----	Nov. 21, 1893	518,214	Ball, H. P. -----	Apr. 17, 1894
509,614	Dcy, C. H. -----	Nov. 28, 1893	518,373	McCarthy, L. -----	Apr. 17, 1894
509,616	Gates, E. B. -----	Nov. 28, 1893	519,446	Crounse and Butledge -----	May 8, 1894
510,217	Walker, J. E. -----	Dec. 5, 1893	520,213	Tighe and Childs. -----	May 22, 1894
510,485	Pfouts, L. S. -----	Dec. 12, 1893	520,606	McCarthy, L. -----	May 29, 1894
511,344	Love, J. C. -----	Dec. 26, 1893	520,737	Jones, B. J. -----	May 29, 1894
511,345	Love, J. C. -----	Dec. 26, 1893	520,937	McCarthy, L. -----	June 5, 1894
511,853	Lec, C. T. -----	Jan. 2, 1894	521,124	Nichols and Lincoln -----	June 5, 1894
511,928	Brockbank, H. M. -----	Jan. 2, 1894	522,180	McTighe, T. J. -----	June 26, 1894
512,888	Luscomb, H. H. -----	Jan. 16, 1894			

## 191. ELECTRIC RAILWAYS.—2. ELECTRIC LOCOMOTIVES.

500,851	Casc, L. W. -----	July 4, 1893	513,895	Dewey, M. W. -----	Jan. 30, 1894
501,195	Sperry, E. A. -----	July 11, 1893	514,109	Winkler, C. F. -----	Feb. 6, 1894
501,246	Eustis, W. E. C. -----	July 11, 1893	514,135	Seymour, H. A. -----	Feb. 6, 1894
501,488	Blood, J. B. -----	July 18, 1893	516,516	Baxter, W. J. -----	Mar. 13, 1894
502,020	Sperry, E. A. -----	July 25, 1893	516,916	Coleman, C. J. -----	Mar. 20, 1894
502,297	Hunter, R. M. -----	Aug. 1, 1893	517,948	Emery, C. E. -----	Apr. 10, 1894
506,358	Brauth, J. F. S. -----	Oct. 10, 1893	517,997	Biddle and Kennedy -----	Apr. 10, 1894
506,786	Libbey, H. W. -----	Oct. 17, 1893	518,006	Lawrence, W. -----	Apr. 10, 1894
507,396	Wilson, J. F. -----	Oct. 24, 1893	518,221	Brown, H. P. -----	Apr. 17, 1894
507,997	Conklin, J. S. -----	Nov. 7, 1893	518,293	Tisdale, C. D. -----	Apr. 17, 1894
509,311	Henry, J. C. -----	Nov. 21, 1893	519,674	Heilman, J. J. -----	May 8, 1894
510,661	Winkler, C. F. -----	Dec. 12, 1893	520,111	Hunter, R. M. -----	May 22, 1894
510,947	Winkler, C. F. -----	Dec. 19, 1893	520,228	Eickmeyer, R. -----	May 22, 1894
511,448	McCornish, J. G. -----	Dec. 26, 1893	520,780	Henry, J. C. -----	June 5, 1894
511,988	Bentley, E. M. -----	Jan. 2, 1894	520,787	Knight, W. H. -----	June 5, 1894
513,401	Lammie, B. G. -----	Jan. 23, 1894	522,067	Lundell, R. L. -----	June 26, 1894
513,859	Anderson, C. G. -----	Jan. 30, 1894			

## 191. ELECTRIC RAILWAYS.—3. SYSTEMS.

506,124	Lewis, H. A. -----	Oct. 3, 1893	514,972	Tesla, N. -----	Feb. 20, 1894
510,602	Hunter, R. M. -----	Dec. 12, 1893	516,666	Thomson, E. -----	Mar. 20, 1894
511,173	Stone and Webster -----	Dec. 19, 1893	517,743	Gavey, W. S. -----	Apr. 3, 1894
512,907	Rowley, S. B. -----	Jan. 16, 1894	518,673	Milligan, T. P. -----	Apr. 24, 1894
513,469	Sachs, J. -----	Jan. 23, 1894	521,891	Reed, C. J. -----	June 26, 1894
514,561	Leffler, P. W. -----	Feb. 13, 1894	521,892	Reed, C. J. -----	June 26, 1894
514,718	Leffler, P. W. -----	Feb. 13, 1894			

## 191. ELECTRIC RAILWAYS.—4. SYSTEMS—BATTERY.

504,484	Amber, A. S. -----	Sept. 5, 1893	517,134	Worthen, W. E. -----	Mar. 27, 1894
512,327	Rogers and Fracker -----	Jan. 9, 1894			

## 191. ELECTRIC RAILWAYS.—7. SYSTEMS—CIRCUIT, MULTIPLE ARC.

509,002	Vail, J. H. -----				Nov. 21, 1893
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## 191. ELECTRIC RAILWAYS.—6. SYSTEMS—CLOSED CONDUIT.

502,216	Wynne, F. -----	July 25, 1893	505,605	McNear, G. W. -----	Sept. 26, 1893
503,487	Lawrence, W. -----	Aug. 15, 1893	505,841	McCarthy, L. -----	Oct. 3, 1893
503,567	Bates, J. M. -----	Aug. 15, 1893	507,339	Weir, R. -----	Oct. 24, 1893
504,104	Conklin, J. S. -----	Aug. 29, 1893	507,606	Woods, G. T. -----	Oct. 31, 1893
505,370	Robinson, E. R. -----	Sept. 19, 1893	508,083	Brain, C. T. B. -----	Nov. 7, 1893

## 191. ELECTRIC RAILWAYS.—6. SYSTEMS—CLOSED CONDUIT—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
508,199	Benton, O. B. -----	Nov. 7, 1893	515,572	Cassidy and Butler -----	Feb. 27, 1894
509,065	Woods, G. T. -----	Nov. 21, 1893	516,374	King, F. L. -----	Mar. 13, 1894
509,072	Dale, J. H. -----	Nov. 21, 1893	516,565	Cummiugs, J. F. -----	Mar. 13, 1894
509,312	Henry, J. C. -----	Nov. 21, 1893	516,626	Brown, E. H. -----	Mar. 13, 1894
509,403	Von Siemens, G. W. -----	Nov. 28, 1894	516,631	Laurence, W. -----	Mar. 13, 1894
509,421	Wörmer, A. -----	Nov. 28, 1893	516,876	Petersen, H. A. F. -----	Mar. 20, 1894
509,651	Chabeauet, E. -----	Nov. 28, 1893	517,886	Pruyn, H. S. -----	Apr. 10, 1894
511,627	Kintner, C. J. -----	Dec. 26, 1893	517,940	Tisdale, C. D. -----	Apr. 10, 1894
512,444	Kintner, C. J. -----	Jan. 9, 1894	518,782	Goodhand, J. E. -----	Apr. 24, 1894
512,440	Pruyn, H. S. -----	Jan. 23, 1894	518,939	Conner, D. E. -----	May 1, 1894
513,894	Demmick, G. W. -----	Jan. 30, 1894	519,291	Purvis, W. B. -----	May 1, 1894
514,056	Beadsley, R. C. -----	Feb. 6, 1894	519,794	Mason, D. -----	May 15, 1894
514,112	Ashley, F. M. -----	Feb. 6, 1894	520,938	Plodeck, P., sr -----	June 5, 1894
514,113	Ashley, F. M. -----	Feb. 6, 1894	521,010	Brand, J. B. -----	June 5, 1894
514,114	Ashley, F. M. -----	Feb. 6, 1894	521,326	Alexander, H. -----	June 12, 1894
514,120	Enholm, O. A. -----	Feb. 6, 1894	521,562	Armat, T. -----	June 19, 1894
514,133	Seymour, H. A. -----	Feb. 6, 1894	521,711	Harris, T. -----	June 19, 1894
514,134	Seymour, H. A. -----	Feb. 6, 1894			

## 191. ELECTRIC RAILWAYS.—5. SYSTEMS—CONDUIT.

500,937	Noyes, G. E. -----	July 4, 1893	510,634	De Voe, W. R. -----	Dec. 12, 1893
500,943	Perrin, F. S. -----	July 4, 1893	510,647	Michieli, J. P. -----	Dec. 12, 1893
502,842	Zell, R. R. -----	Aug. 8, 1893	511,346	Love, J. C. -----	Dec. 26, 1893
503,710	Warner, A. -----	Aug. 22, 1893	514,827	Hampton, R. I. -----	Feb. 13, 1894
504,549	Bidwell, B. -----	Sept. 5, 1893	517,549	Keithly, W. C. -----	Apr. 3, 1894
504,676	Flagg, S. H. -----	Sept. 5, 1893	517,692	Goreham, H. A. -----	Apr. 3, 1894
504,847	Oler, H. D. -----	Sept. 12, 1893	517,804	Jenkins, W. F. -----	Apr. 3, 1894
506,993	Franklin, H. H. -----	Oct. 17, 1893	518,540	Banholzer, P. P. -----	Apr. 17, 1894
507,493	Green, G. F. -----	Oct. 24, 1893	518,695	Maynard, C. A. -----	Apr. 24, 1894
508,104	Goreham, H. A. -----	Nov. 7, 1893	519,328	Graham and Allen -----	May 8, 1894
509,622	Johnson, E. H. -----	Nov. 28, 1893	519,380	Cook, J. F. -----	May 8, 1894
510,061	De Voe, W. R. -----	Dec. 5, 1893	520,304	De Voe, W. R. -----	May 22, 1894
510,142	Jnst, P. C. -----	Dec. 5, 1893	520,356	Siemens, C. W. -----	May 22, 1894

## 191. ELECTRIC RAILWAYS.—9. SYSTEMS—CONVERTERS.

502,533	Von Siemens, G. W. -----	Aug. 1, 1893	516,188	Dewey, M. W. -----	Mar. 13, 1894
502,539	Von Siemens, G. W. -----	Aug. 1, 1893	517,531	Roehl, C. E. -----	Apr. 3, 1894
509,518	Edison, T. A. -----	Nov. 28, 1893	520,975	Westinghouse and Scott. -----	June 5, 1894
511,524	Hesse, G. E. -----	Dec. 26, 1893			

## 191. ELECTRIC RAILWAYS.—11. SYSTEMS—OVERHEAD.

501,009	Henry, J. C. -----	July 4, 1893	511,419	Geise, H. -----	Dec. 26, 1893
503,442	Sperry, E. A. -----	Aug. 15, 1893	511,634	Mauldin, J. L. -----	Dec. 26, 1893
504,113	Palmros, A. -----	Aug. 29, 1893	512,201	Mackenzie, G. W. -----	Jan. 2, 1894
506,149	Binford, E. R. -----	Oct. 3, 1893	513,846	Valley, G. -----	Jan. 30, 1894
506,312	Harris, S. -----	Oct. 10, 1893	518,847	Valley, G. -----	Jan. 30, 1894
507,641	Akarmn and Le Noir -----	Oct. 31, 1893	514,274	Pruyn, H. S. -----	Feb. 6, 1894
507,732	Huben, G. A. -----	Oct. 31, 1893	516,808	Henry, J. C. -----	Mar. 20, 1894
508,615	Henry, J. C. -----	Nov. 14, 1893	519,115	Henry, J. C. -----	May 1, 1894
508,622	Knight, W. H. -----	Nov. 14, 1893	519,519	Allen, E. H. -----	May 8, 1894
508,669	Bassett, N. C. -----	Nov. 14, 1893	520,274	Von Siemens, G. W. -----	May 22, 1894
510,201	Smart, D. V. B. -----	Dec. 5, 1893	520,329	Muir, R. -----	May 22, 1894
511,017	Hendrix, W. W. -----	Dec. 19, 1893	520,971	Smith and Clabaugh -----	June 5, 1894
511,342	Love, J. C. -----	Dec. 26, 1893	521,163	Hawkesworth, R. M. -----	June 12, 1894
511,343	Love, J. C. -----	Dec. 26, 1893			

## 191. ELECTRIC RAILWAYS.—12. SYSTEMS—OVERHEAD, TROLLEYS.

501,543	Tonsley, E. M. -----	July 18, 1893	503,562	Clark, J. W. -----	Aug. 15, 1893
501,965	Sperry, E. A. -----	July 25, 1893	503,570	Allison, J. H. -----	Aug. 22, 1893
502,229	Van Depoele, C. J. -----	July 25, 1893	503,775	Pritchard, J. K. -----	Aug. 22, 1893
502,530	Rau, O. -----	Aug. 1, 1893	504,255	Sprague, F. J. and P. F. O. -----	Aug. 29, 1893
502,553	Dobbie, R. S. -----	Aug. 1, 1893	504,405	Shaaber, M. -----	Sept. 5, 1893
502,629	Moore, G. -----	Aug. 1, 1893	504,734	Maddox, J. P. -----	Sept. 12, 1893
503,421	Jones, H. C. -----	Aug. 15, 1893	505,204	Laurence, W. -----	Sept. 19, 1893



## 191. ELECTRIC RAILWAYS.—12. SYSTEMS—OVERHEAD, TROLLEYS—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
505,994	Sperry, E. A -----	Oct. 3, 1893	513,023	Mackenzie, G. W -----	Jan. 16, 1894
506,463	Benjamin, G. H -----	Oct. 10, 1893	513,566	Gale, E -----	Jan. 30, 1894
506,617	Anderson, J. M -----	Oct. 10, 1893	514,801	Williams, J. A -----	Feb. 13, 1894
507,247	Thompson, C. H -----	Oct. 24, 1893	515,654	Comstock, B. F -----	Feb. 27, 1894
507,539	Heston, W -----	Oct. 31, 1893	516,492	Knapp, C -----	Mar. 13, 1894
507,733	Huben, G. A -----	Oct. 31, 1893	517,028	Church, F. S -----	Mar. 27, 1894
508,538	Chase, J -----	Nov. 14, 1893	517,166	Mowry, L. G -----	Mar. 27, 1894
508,539	Field, S. D -----	Nov. 14, 1893	518,015	Thompson, R. W -----	Apr. 10, 1894
509,123	Fuller, J. T -----	Nov. 21, 1893	518,357	Straus, T -----	Apr. 17, 1894
511,018	Hendrix, W. W -----	Dec. 19, 1893	518,362	Ansley, J. D -----	Apr. 17, 1894
511,019	Hendrix, W. W -----	Dec. 19, 1893	518,952	Hooper, G. W -----	May 1, 1894
511,763	Dunker, W. F -----	Jan. 2, 1894	519,837	Cruser, V. D -----	May 15, 1894
511,824	Vceder, C. H -----	Jan. 2, 1894	520,156	Brown, T. M -----	May 22, 1894
511,941	Gay and Parsons -----	Jan. 2, 1894	520,758	Laurence, W -----	May 29, 1894
512,535	Boynton, E. M -----	Jan. 9, 1894	512,602	Cates, O. G -----	June 19, 1894
512,923	Benthuyssen, W. V -----	Jan. 16, 1894	522,057	Heastings, E. F. A -----	June 26, 1894

## 191. ELECTRIC RAILWAYS.—13. SYSTEMS—TELPER.

511,862	Roberts, C. H -----	Jan. 2, 1894
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## 18. CAOUTCHOUC AND MINOR PLASTICS.—11. INSULATING COMPOUND MATERIAL.

508,653	Thomson, E -----	Nov. 14, 1893
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## 40. ADVERTISING.—14. SIGNS.

501,533	Page, A. D -----	July 18, 1893
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## 58. HOROLOGY.—28. CLOCKS—ELECTRIC.

502,156	Wiseman, A. G -----	July 25, 1893	511,946	Gregory, F. L -----	Jan. 2, 1894
502,157	Wiseman, A. G -----	July 25, 1893	514,641	Campiche, H -----	Feb. 13, 1894
502,215	Wiseman, A. G -----	July 25, 1893	517,480	Prentiss, H. S -----	Apr. 3, 1894
502,381	Prentiss, H. S -----	Aug. 1, 1893	518,337	Warner, C. D -----	Apr. 17, 1894
504,095	Schweizer, E -----	Aug. 29, 1893	520,446	Misell, D -----	May 29, 1894
508,215	Gerry, J. H -----	Nov. 7, 1893	521,396	Vidal and Herriew -----	June 12, 1894

## 58. HOROLOGY.—15. TIME ALARMS.

502,811	Deane, W. H -----	Aug. 8, 1893	513,262	Gerry, J. H -----	Jan. 23, 1894
507,959	Wyman, C. T -----	Oct. 31, 1893	518,971	Sommer, H. P -----	May 1, 1894

## 58. HOROLOGY.—16. TIME CHECKS.

502,226	Dean, S. A -----	July 25, 1893	520,848	Henry, A. J -----	June 5, 1894
515,805	Watson, W. W -----	Mar. 6, 1894			

## 66. KNITTING AND NETTING.—7. STOPPING.

515,965	Merritt, A. A -----	Mar. 6, 1894
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## 67. LAMPS AND GAS FITTINGS.—94. GUARDS.

516,801	Demmick, G. W -----	Mar. 20, 1894
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## 67. LAMPS AND GAS FITTINGS.—70. HEAD LIGHTS.

503,602	Hunter, R. M -----	Aug. 22, 1893	516,821	Knowles, E. R -----	Mar. 20, 1894
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## 67. LAMPS AND GAS FITTINGS.—67. SHADE SUPPORTS.

No.	NAME.	DATE.	No.	NAME.	DATE.
507,714	Marten, A. S.-----	Oct. 31, 1893	510,095	Seavey, G. T.-----	Dec. 5, 1893
509,502	Werline, H. E.-----	Nov. 28, 1893			

## 70. LOCKS AND LATCHES.—50. ELECTRIC LOCKS.

505,270	Hicks, O. H. and Troy, R. F.---	Sept. 19, 1893	518,667	Elden, J.-----	Apr. 24, 1894
505,271	Hicks, O. H. and Troy, R. F.---	Sept. 19, 1893	418,877	Curwhan, S. H.-----	Apr. 24, 1894
516,478	Donnelly, J. R.-----	Mar. 13, 1894			

## 73. MEASURING INSTRUMENTS.—3. BALANCES.

521,331	Buzby, C. E.-----				June 12, 1894
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## 73. MEASURING INSTRUMENTS.—86. CASH REGISTER.

502,287	Ehrlich, L.-----				Aug. 1, 1893
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## 73. MEASURING INSTRUMENTS.—34. RECORDERS.

23,140	Weston, E.-----			(Design)-	Mar. 20, 1894
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## 73. MEASURING INSTRUMENTS.—88. RECORDERS—MANUAL.

505,293	Hess, H. K.-----				Sept. 19, 1893
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## 73. MEASURING INSTRUMENTS.—92. RECORDERS—SPEED.

508,614	Henry, J. C.-----				Nov. 14, 1893
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## 73. MEASURING INSTRUMENTS.—117. TELEMETRY.

502,399	Haskins, C. H.-----				Aug. 1, 1893
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## 75. METALLURGY.—162. ELECTROLYSIS—AQUEOUS BATH.

501,628	Richardson, J. C.-----	July 18, 1893	514,275	Randolph, L. S.-----	Feb. 6, 1894
501,996	Emmens, S. H.-----	July 25, 1893	515,763	Von Grabowski, C.-----	Mar. 6, 1894
501,997	Emmens, S. H.-----	July 25, 1893	518,731	Bauer, F. R.-----	Apr. 24, 1894
512,970	Johanson, J. B.-----	Jan. 16, 1894			

## 75. METALLURGY.—4. ELECTROLYSIS—AQUEOUS BATH, ANODES.

508,091	Cutten, E. B.-----	Nov. 7, 1893	510,901	Cutten, E. B.-----	Dec. 19, 1893
510,899	Cutten, E. B.-----	Dec. 19, 1893	510,902	Cutten, E. B.-----	Dec. 19, 1893

## 75. METALLURGY.—5. ELECTROLYSIS—AQUEOUS BATH APPARATUS.

504,774	Craney, T.-----	Sept. 12, 1893	518,786	Le Suren, E. A.-----	Apr. 24, 1894
23,112	Scattergood, C. F.-----	Mar. 13, 1894			

## 75. METALLURGY.—9. ELECTROLYSIS—AQUEOUS BATH, CHEMICALS.

501,578	Pfanne, H.-----	July 18, 1893	511,682	Chalandre, A. J. O.-----	Dec. 26, 1893
507,374	Lyte, F. M.-----	Oct. 24, 1893	518,710	Carmichael, H.-----	Apr. 24, 1894
508,241	Richardson, J. C.-----	Nov. 7, 1893	519,400	Blumenberg, H., jr.-----	May 8, 1894
510,900	Cutten, E. B.-----	Dec. 19, 1893			

## 75. METALLURGY.—158. ELECTROLYSIS—FUSED BATH.

No.	NAME.	DATE.	No.	NAME.	DATE.
502,431	Eames, H. H.-----	Aug. 1, 1893	503,451	Case, W. E.-----	Aug. 15, 1893
503,429	Lyte, F. M. and C. H. M.-----	Aug. 15, 1893			

## 75. METALLURGY.—149. FURNACE.

512,602	Coffin, C. L.-----				Jan. 12, 1894
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## 22. METAL FOUNDRY.—16. METAL MOLDS—SOFT METAL MACHINES.

516,337	Pendleton, J. M.-----				Mar. 13, 1894
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## 206. METAL WELDING.—8. METAL WORKING.

501,546	Thomson, E. and Harthan, C. E.-----	July 18, 1893	515,652	Coffin, C. L.-----	Feb. 27, 1894
501,755	Bain, F.-----	July 18, 1893	515,778	Lemp and Moody-----	Mar. 6, 1894
501,825	Coffin, C. L.-----	July 18, 1893	516,312	Lemp and Moody-----	Mar. 13, 1894
594,496	Lemp, H.-----	Sept. 5, 1893	520,299	Coffin, C. L.-----	May 22, 1894
505,263	Benton, G. D. and Angell, E. E.-----	Sept. 19, 1893	520,300	Coffin, C. L.-----	May 22, 1894
507,419	Coffin, C. L.-----	Oct. 24, 1893	520,357	Hunter, R. M.-----	May 22, 1894
512,604	Coffin, C. L.-----	Jan. 9, 1894	250,360	Hunter, R. M.-----	May 22, 1894

## 83. MILLS.—71. MAGNETIC SEPARATORS.

500,604	Payne, C. Q.-----	July 4, 1893	504,200	Conkling, G.-----	Aug. 29, 1893
500,605	Payne, C. Q.-----	July 4, 1893	504,201	Conkling, G.-----	Aug. 29, 1893
500,606	Payne, C. Q.-----	July 4, 1893			

## 84. MUSIC.—81. ELECTRIC ACTIONS.

501,540	Singer, P. E.-----	July 18, 1893	501,543	Singer, P. E.-----	July 18, 1893
501,541	Singer, P. E.-----	July 18, 1893	502,103	Polenoff, K.-----	July 25, 1893
501,542	Singer, P. E.-----	July 18, 1893			

## 88. OPTICS.—2. DISTANCE INSTRUMENTS.

510,418	Fiske, B. A.-----				Dec. 12, 1893
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## 98. PNEUMATICS.—1. NAVIGATION—AERIAL.

502,168	Batley, S. B.-----				July 25, 1893
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## 101. PRINTING.—133. STENCIL-MAKING PENS.

516,212	Lewis, A. D.-----				Mar. 13, 1894
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## 105. RAILWAY CARS.—28. STEAM STREET CARS.

501,676	Craig, L. D.-----				July 18, 1893
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## 126. SHEET METAL WIRE MAKING.—52. SOLDERING IRONS—HEATERS, ELECTRIC.

508,284	Coffin, C. L.-----				Nov. 7, 1893
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## 136. STEAM VALVES.—11. ELECTRIC THROTTLES.

517,199	Stannard, J. E.-----				Mar. 27, 1894
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## 126. STOVES AND FURNACES.—14. DAMPERS—AUTOMATIC ELECTRIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
516,198	Goodhue, C. F -----				Mar. 13, 1894

## 126. STOVES AND FURNACES.—117. ELECTRIC HEATERS.

502,495	Jones, C. E -----	Aug. 1, 1893	516,071	Applegard, A. E -----	Mar. 6, 1894
507,217	Coombs, C. L -----	Oct. 24, 1893	516,095	Jenkins, S. B -----	Mar. 6, 1894
507,941	Snee, W -----	Oct. 31, 1893	516,152	Cochran, A -----	Mar. 6, 1894
512,797	Bowen, W. J -----	Jan. 16, 1894	516,167	Rider and Lewis -----	Mar. 6, 1894
513,109	Hough and Burns -----	Jan. 23, 1894	516,508	Omeara, J -----	Mar. 13, 1894
515,401	Hatch, A. S -----	Feb. 27, 1894	517,170	Rowley, L. B -----	Mar. 27, 1894
515,693	Nutting, S. E -----	Feb. 27, 1894	519,043	Jenkins, S. B -----	May 1, 1894

## 187. ELEVATORS.—1. ELEVATORS.

516,343	Blake and Lacey -----				Mar. 13, 1894
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## 187. ELEVATORS.—8. SAFETY DEVICE.

11,409	Herdman, F. E -----			(Reis.)-	Mar. 27, 1894
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## 194. PHONOGRAPHS.—17. COIN-CONTROLLED APPARATUS.

502,246	Burnett, W. S -----	July 25, 1893	518,191	Keller, A. K -----	Apr. 10, 1894
516,433	Gentry, W. F -----	Mar. 13, 1894	518,192	Keller, A. K -----	Apr. 10, 1894
517,445	Dashiell, S. M -----	Apr. 3, 1894	518,299	Gilliland and Toppan -----	Apr. 10, 1894
518,190	Keller, A. K -----	Apr. 10, 1894			





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# APPENDIX No. XIII.

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## PART II.

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CONSISTING OF A

NUMERICAL AND CHRONOLOGICAL INDEX OF ALL PATENTS

RELATING TO

## ELECTRICITY.

Issued from July 1, 1893, to June 30, 1894, inclusive, giving names of Inventors, numbers and dates of Patents, and the sub-class to which each belongs.

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# NUMERICAL INDEX

OF

## PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1893, TO JUNE 30, 1894.

No.	NAME.	CLASS.	DATE.
500,545	Anders, G. L.	Telephones, systems	July 4, 1893
500,563	Decrow, W. E.	Telegraphy, fire, variable signal, dial	July 4, 1893
500,601	Offrell, O.	Cut-outs, thermal	July 4, 1893
500,604	Payne, C. Q.	Mills, magnetic separators	July 4, 1893
500,605	Payne, C. Q.	do	July 4, 1893
500,606	Payne, C. Q.	do	July 4, 1893
500,614	Reist, H. G.	Magneto-electric	July 4, 1893
500,622	Silvey, W. S.	Batteries, secondary	July 4, 1893
500,629	Thomson, E.	Cut-outs, thermal	July 4, 1893
500,630	Thomson, E.	System of distribution	July 4, 1893
500,631	Thomson, E.	Rheostats	July 4, 1893
500,657	Hunter, R. M.	Lights, arc, gravity feed, clutch	July 4, 1893
500,663	Mugnier, J. C. G.	Railway signals, block systems	July 4, 1893
500,670	Nickerson, W. E. and Carey, E. E.	Lights, incandescent	July 4, 1893
500,671	Nickerson, W. E.	do	July 4, 1893
500,681	Carruther, S. H.	Medical and surgical, electrodes	July 4, 1893
500,726	Van Nuis, C. S.	Telegraphy, lightning arresters	July 4, 1893
500,822	Strauss, J. B.	Alarms	July 4, 1893
500,827	Thomas, G. L. and Seward, E. E.	Railway signals, cab	July 4, 1893
500,823	Turbayne, W. A.	Telegraphy, lightning arresters	July 4, 1893
500,829	Turbayne, W. A.	Lights, arc, special features	July 4, 1893
500,849	Burnett, H. D. and Doane, S. E.	Lights, incandescent	July 4, 1893
500,851	Case, L. W.	Electric locomotives	July 4, 1893
500,865	Duncan, T.	Meters	July 4, 1893
500,902	Jefferson, G. W.	Magneto-electric	July 4, 1893
500,913	Linton, G. E.	Cut-outs, thermal	July 4, 1893
500,937	Noyes, G. E.	Railways, systems, conduit	July 4, 1893
500,943	Perrin, F. S.	do	July 4, 1893
501,000	Duncan, T.	Meters	July 4, 1893
501,009	Henry, J. C.	Railways, systems, overhead	July 4, 1893
501,021	McCarthy, L.	Lights, incandescent	July 4, 1893
501,049	Bassett, N. C.	Magneto-electric	July 11, 1893
501,059	Elkins, W. H.	Regulators	July 11, 1893
501,060	Fiske, J. P. B.	Magneto-electric	July 11, 1893
501,065	Haskins, C. D.	Cut-outs, mechanical, oscillating snap	July 11, 1893
501,071	Höfer, C. F. W.	Cut-outs, mechanical, sliding	July 11, 1893
501,074	Jergle, J.	Lights, arc, positive feed, gear-clutch	July 11, 1893
501,080	Kirkegaard, G.	do	July 11, 1893
501,081	Kirkegaard, G.	do	July 11, 1893
501,085	Larned, S. J. and Pickernell, F. A.	Telephones, systems, divided central	July 11, 1893
501,086	Larned, S. J. and Pickernell, F. A.	do	July 11, 1893
501,087	Lockwood, T. D. and Larned, S. J.	do	July 11, 1893
501,094	Nordmann, P.	Systems of distribution	July 11, 1893
501,095	Nordmann, P.	Lighting, systems, automatic regulation	July 11, 1893
501,102	Pickernell, F. A.	Telephones, systems	July 11, 1893
501,114	Thomson, E.	Telegraphy, lightning arresters	July 11, 1893
501,117	Tyler, H. L.	Magneto-electric	July 11, 1893
501,144	Hochhausen, W.	Galvanometers	July 11, 1893
501,163	Scribner, C. E.	Telephones, switches	July 11, 1893
501,169	Scribner, C. E.	Telephones, systems	July 11, 1893
501,170	Scribner, C. E.	Lights, arc, gravity feed, clutch	July 11, 1893
501,172	Thomson, E.	Lights, incandescent	July 11, 1893
501,173	Thum, F. A.	Lighting, systems, hand regulation	July 11, 1893
501,183	Daves, W.	Railway signals, sectional rail	July 11, 1893
501,185	Dunbar, F. W.	Annunciators, step-by-step	July 11, 1893
501,191	Offrell, O.	Cut-outs, mechanical	July 11, 1893
501,193	Shaw, A. J.	Magneto-electric	July 11, 1893
501,194	Sperry, E. A.	do	July 11, 1893
501,195	Sperry, E. A.	Electric locomotives	July 11, 1893
501,201	Wurts, A.	Cut-outs, thermal	July 11, 1893
501,205	Ekstrom, A.	Lights, sockets and keys	July 11, 1893
501,206	Fiske, J. P. B.	Cut-outs, mechanical, sliding	July 11, 1893
501,241	Browne, J. E.	Telegraphy, lightning arresters	July 11, 1893

No.	NAME.	CLASS.	DATE.
501,246	Eustis, W. E. C	Electric locomotives	July 11, 1893
501,258	Scars, W	Indicators, station	July 11, 1893
501,270	Fitzgerald, P. J	Telegraphy, circuit closers	July 11, 1893
501,292	Newman, W. J	Bells	July 11, 1893
501,306	Walker, W. J. and Bedford, A. L	Alarms, burglar	July 11, 1893
501,309	Wightman, M. J. and Lemp, H	Regulators	July 11, 1893
501,376	Smith, J. J. and Findlater, F	Magneto-electric	July 11, 1893
501,405	Burchell, N. L. and Nevins, B. L., jr	Telephones, supports	July 11, 1893
501,438	Potter, E. C	Railway signals, block	July 11, 1893
501,445	Sayres, W. B	Conductors, underground	July 11, 1893
501,450	Stanley, L. T	Alarms, burglar	July 11, 1893
501,472	Spencer, T	Telephones, systems	July 11, 1893
501,481	Meston, A. W	Railways, conductor supports and insulators	July 11, 1893
501,482	Parker, H. L. and Meston, A. W	Motors	July 11, 1893
500,485	Ball, H. P	Lights, sockets and keys	July 18, 1893
501,488	Blood, J. B	Electric locomotives	July 18, 1893
501,491	Cary, E. E	Lights, incandescent	July 18, 1893
501,502	Gifford, A. T	Lights, incandescent, special features	July 18, 1893
501,519	Lorrain, J. G	Telegraphy, fire, alarms and extinguishers	July 18, 1893
501,524	Morgan, W. G	Lights, incandescent, special features	July 18, 1893
501,529	Nickerson, W. E. and Cary, E. E	Lights, incandescent	July 18, 1893
501,530	Nickerson, W. E	do	July 18, 1893
501,531	Nickerson, W. E	do	July 18, 1893
501,532	Offrell, O	Regulators	July 18, 1893
601,533	Page, A. D	Advertising, signs	July 18, 1893
501,540	Singer, P. E	Music, electric actions	July 18, 1893
501,541	Singer, P. E	do	July 18, 1893
501,542	Singer, P. E	do	July 18, 1893
501,543	Singer, P. E	do	July 18, 1893
501,546	Thomson, E. and Harthan, C. E	Metal working	July 18, 1893
501,548	Tonsley, E. M	Railways, systems, overhead, trolleys	July 18, 1893
501,550	Wagner, H. C	Medical and surgical, body-wear	July 18, 1893
501,558	Cabot, J. A	Systems of distribution	July 18, 1893
501,565	Görldt, G	Igniting apparatus	July 18, 1893
501,578	Pfanne, H	Electrolysis, aqueous bath, chemical	July 18, 1893
501,580	Sachs, G	Lights, sockets and keys	July 18, 1893
501,589	Hunter, R. M	Galvanometers	July 18, 1893
501,610	Brown, J. A	Telephones, magnetic	July 18, 1893
501,628	Richardson, J. C	Electrolysis, aqueous bath	July 18, 1893
501,631	Smith, J. E	Telegraphy, fire	July 18, 1893
501,653	Harvard, J	do	July 18, 1893
501,676	Craig, L. D	Street cars	July 18, 1893
501,701	Wilder, C. M	Railway signals	July 18, 1893
501,707	Dingle, W. H. and Urquhart, J. M	Cut-outs, oscillating snaps	July 18, 1893
501,708	Doane, F. H	Telegraphy, fire	July 18, 1893
501,723	King, F	Batteries, secondary	July 18, 1893
501,755	Bain, F	Metal working, heating	July 18, 1893
501,757	Bergmann, S	Lights, arc, gravity feed, gear-clutch	July 18, 1893
501,758	Bergmann, S	Lights, arc, special features	July 18, 1893
501,768	Demster, J. T	Lights, arc, gravity feed, gear-clutch	July 18, 1893
501,777	Fisher, C. J	Alarms, burglar	July 18, 1893
501,825	Coffin, C. L	Metal working	July 18, 1893
501,842	Long, M. W	Motors	July 18, 1893
501,847	Scribner, C. E	Telephones, systems, multiple switch-board, test.	July 18, 1893
501,849	Standish, B. H	Medical and surgical, body-wear	July 18, 1893
501,859	Bell, O. A	Telephones, switch-boards	July 18, 1893
501,861	Berliner, A. D	Medical and surgical, body-wear	July 18, 1893
501,884	Klecs, W. H	Lights, arc, gravity-feed, gear-clutch	July 18, 1893
501,905	Bernhardt, C	Telegraphy, fire, automatic	July 18, 1893
501,911	Bergmann, S	Lights, arc, special features	July 25, 1893
501,938	Hazleton, F. D	do	July 25, 1893
591,960	Reist, H. G	Magneto-electric	July 25, 1893
501,961	Richardson, C. H	Regulators	July 25, 1893
501,968	Sperry, E. A	Railways, systems, overhead, trolleys	July 25, 1893
501,996	Emmens, S. H	Electrolysis, aqueous bath	July 25, 1893
501,997	Emmens, S. H	do	July 25, 1893
502,007	McCornish, A. L	Lighting, systems	July 25, 1893
502,020	Sperry, E. A	Electric locomotives	July 25, 1893
502,022	Thomson, E	Galvanometers	July 25, 1893
502,040	Hussey, C. A	Rheostats	July 25, 1893
502,077	Hunter, R. M	Galvanometers	July 25, 1893
502,083	McEvoy, E. J	Conductors	July 25, 1893
502,088	Wetmore, E. P	Railways, conductor supports and insulators	July 25, 1893
502,091	Colvin, F. R	Telephones, systems	July 25, 1893
502,098	Jones, R. M	Motors	July 25, 1893
502,103	Polenoff, K	Music, electric actions	July 25, 1893



No.	NAME.	CLASS.	DATE.
502,104	Roe, A. R.	Lighting, systems, hand regulators	July 25, 1893
502,105	Roe, A. R.	do	July 25, 1893
502,156	Wiseman, A. G.	Clocks, electric	July 25, 1893
502,157	Wiseman, A. G.	do	July 25, 1893
502,166	Barrett, P. J.	Lights, arc, gravity feed, clutch	July 25, 1893
502,168	Batter, S. B.	Pneumatics, navigation, aerial	July 25, 1893
502,207	Sacks, J.	Telegraphy, fire	July 25, 1893
502,215	Wiseman, A. G.	Clocks, electric	July 25, 1893
502,216	Wynne, F.	Railways, closed conduit	July 25, 1893
502,226	Dean, S. A.	Time checks	July 25, 1893
502,229	Goodman, E. W.	Connectors	July 25, 1893
502,229	Van Depoele, C. J.	Railways, systems, overhead, trolleys	July 25, 1893
502,246	Burnett, W. S.	Phonographs, coin-controlled apparatus	July 25, 1893
502,262	Patterson, W. R.	Telephones, systems	July 25, 1893
11,354	Kintzing, R. C.	(Reis.) Magneto-electric	July 25, 1893
502,272	Bentley, E. M.	Lighting, systems, hand regulators	Aug. 1, 1893
502,273	Bergmann, S.	Lights, arc, special features	Aug. 1, 1893
502,285	Elkins, W. H.	Regulators	Aug. 1, 1893
502,287	Ehrlich, L.	Measuring instruments, cash register	Aug. 1, 1893
502,297	Hunter, R. M.	Electric locomotives	Aug. 1, 1893
502,300	Kells, C. E., jr.	Cut-outs, mechanical	Aug. 1, 1893
502,315	Peirce, E. E.	Indicators	Aug. 1, 1893
502,322	Scharf, P.	Lights, incandescent	Aug. 1, 1893
502,325	Sparks, C. H.	Alarms, burglar	Aug. 1, 1893
502,330	Thomson, E.	Cut-outs, thermal	Aug. 1, 1893
502,333	Voorhees, G. T.	Lighting, ceiling block	Aug. 1, 1893
502,340	Wood, J. J.	Rheostats	Aug. 1, 1893
502,377	Paugh, S.	Magneto-electric	Aug. 1, 1893
502,381	Prentiss, H. S.	Clocks, electric	Aug. 1, 1893
502,384	Ryan, H. J.	Magneto-electric	Aug. 1, 1893
502,398	Flanders, B. S.	Telephones, supports	Aug. 1, 1893
502,399	Haskins, C. H.	Measuring instruments, telemetry	Aug. 1, 1893
502,405	Lyons, E. H.	Batteries, galvanic	Aug. 1, 1893
502,431	Eames, H. H.	Electrolysis, fused bath	Aug. 1, 1893
502,444	Moore, McF. D.	Regulators	Aug. 1, 1893
502,449	Verley, H. S. L.	Telegraphy, relays and sounders	Aug. 1, 1893
502,454	Alberg, A.	Meters	Aug. 1, 1893
502,465	Mehren, J. F.	Cut-outs, thermal	Aug. 1, 1893
502,466	McQuarrie, J. L.	Telephones, systems, multiple switch-board, divided central.	Aug. 1, 1893
502,471	Scribner, C. E.	Lights, arc, gravity feed, clutch	Aug. 1, 1893
502,472	Spencer, T.	Annunciators, drop systems	Aug. 1, 1893
502,475	Stevens, G. W.	Railways, switches, automatic	Aug. 1, 1893
502,487	Drake, C. C.	Telegraphy, fire, engine house apparatus	Aug. 1, 1893
502,494	Jones, C. E.	Heaters, stoves and furnaces	Aug. 1, 1893
502,518	Hoffmann, C. H.	Cut-outs, electro-magnetic	Aug. 1, 1893
502,519	Hoffmann, C. H.	Cut-outs, mechanical	Aug. 1, 1893
502,530	Rau, O.	Railways, systems, overhead, trolleys	Aug. 1, 1893
502,535	Scribner, C. E.	Lights, arc, gravity feed, clutch	Aug. 1, 1893
502,536	Scribner, C. E.	do	Aug. 1, 1893
502,538	Von Siemens, G. W.	Railways, systems, converters	Aug. 1, 1893
502,539	Von Siemens, G. W.	do	Aug. 1, 1893
502,541	Thalaker, C.	Cut-outs, thermal	Aug. 1, 1893
502,553	Dobbie, R. S.	Railways, systems, overhead, trolleys	Aug. 1, 1893
502,614	Clarke, E. H.	Insulators	Aug. 1, 1893
502,626	Lattig, J. W.	Railway signals, sectional rail	Aug. 1, 1893
502,627	Lattig, J. W.	Railways, track instruments	Aug. 1, 1893
502,629	Moore, G.	Railways, systems, overhead, trolleys	Aug. 1, 1893
502,655	Bryant, W. C.	Lights, sockets and keys	Aug. 1, 1893
502,660	Dnnbar, F. W.	Telephones, systems, multiple switch-board, divided central.	Aug. 1, 1893
502,670	Hofbauer, F. X.	Magneto-electric	Aug. 1, 1893
502,677	McCarthy, L.	Railways, conductor supports and insulators	Aug. 1, 1893
502,682	Von Siemens, W.	Systems of distribution	Aug. 1, 1893
502,687	Weber, A.	Lights, arc, special features	Aug. 1, 1893
502,693	Bell, L.	Galvanometers	Aug. 8, 1893
502,702	Chesney, C. C.	Lighting, systems	Aug. 8, 1893
502,734	Ludlow, S. W.	Telegraphy, circuit closers, thermal	Aug. 8, 1893
502,749	Oehring, A. J.	do	Aug. 8, 1893
502,753	Payne, W. H.	Medical and surgical, body-wear	Aug. 8, 1893
502,768	Scribner, C. E.	Telephones, systems	Aug. 8, 1893
502,769	Scribner, C. E.	do	Aug. 8, 1893
502,770	Scribner, C. E.	Telephones, systems, multiple switch-board	Aug. 8, 1893
502,771	Scribner, C. E.	do	Aug. 8, 1893
502,772	Scribner, C. E.	do	Aug. 8, 1893
502,773	Scribner, C. E.	do	Aug. 8, 1893
502,774	Scribner, C. E.	do	Aug. 8, 1893

No.	NAME.	CLASS.	DATE.
502,775	Scribner, C. E	Telephones, systems, multiple switch-board	Aug. 8, 1893
502,776	Le Cheverell, J. H	Medical and surgical, body-wear	Aug. 8, 1893
502,777	Sheldon, S. and Rooney, J. S	Magneto-electric	Aug. 8, 1893
502,788	Thomson, E	Regulators	Aug. 8, 1893
502,804	Andrus, D. P	Medical and surgical, body-wear	Aug. 8, 1893
502,811	Deane, W. H	Time alarm	Aug. 8, 1893
502,824	Morse, L	Batteries, secondary	Aug. 8, 1893
502,825	Morse, L	do	Aug. 8, 1893
502,826	McCarthy, L	Cut-outs, mechanical	Aug. 8, 1893
502,842	Zell, R. R	Railways, conduit, systems	Aug. 8, 1893
502,889	Palmer, F. S	Telegraphy, fire, automatic	Aug. 8, 1893
502,948	Buchanan, L. H	Lights, arc, positive feed, gear-clutch	Aug. 8, 1893
502,983	McEvoy, J. H	do	Aug. 8, 1893
502,988	Parshall, H. F	Magneto-electric	Aug. 8, 1893
503,039	Essicks, W. B	Railways, conductor supports and insulators	Aug. 8, 1893
503,099	Scribner, C. E	Telephones, systems	Aug. 8, 1893
503,100	Seaton, B. C	Railway signals, sectional rail	Aug. 8, 1893
503,101	Seaton, B. C	Connectors	Aug. 8, 1893
503,106	Wheeler, S. S	Magneto-electric	Aug. 8, 1893
503,108	Bates, J. H	Lights, incandescent	Aug. 8, 1893
503,115	Allison, W. D	Telephones, systems	Aug. 15, 1893
503,157	McNeil, W. and Tinder, J. H	Lighting, systems	Aug. 15, 1893
503,180	Warner, E. P	Cut-outs, mechanical	Aug. 15, 1893
503,107	Webb, H. L	Connectors	Aug. 15, 1893
503,183	Wessel, F. A	Motors, alternating	Aug. 15, 1893
503,186	A. Wurts	Telegraphy, condensers	Aug. 15, 1893
503,187	Young, J	Annunciators	Aug. 15, 1893
503,213	McKay, H. S	Motors	Aug. 15, 1893
503,252	Peckernell, F. A	Telephones, systems, multiple switch-board, divided central.	Aug. 15, 1893
503,279	Davis, H. P	Motors, hand operating	Aug. 15, 1893
503,321	Hunter, R. M	Systems of distribution	Aug. 15, 1893
503,349	Lee, C. T	Lights, sockets and keys	Aug. 15, 1893
503,371	Heil, A	Telegraphy, keys	Aug. 15, 1893
503,372	Heil, A	Telegraphy, Morse registers	Aug. 15, 1893
503,384	Pawolowski, J	Insulators	Aug. 15, 1893
503,415	Gabarro, R	Batteries, galvanic	Aug. 15, 1893
503,421	Jones, H. C	Railways, systems, overhead, trolleys	Aug. 15, 1893
503,427	A. Kohl	Connectors	Aug. 15, 1893
503,429	Lyte, F. W. and C. H. M.	Electrolysis, fused bath	Aug. 15, 1893
503,443	Sperry, E. A	Railways, systems, overhead	Aug. 15, 1893
503,445	Thompson, E	Magneto-electric	Aug. 15, 1893
503,449	Blood, J. B	do	Aug. 15, 1893
503,451	Case, W. E	Electrolysis, fused bath	Aug. 15, 1893
503,453	Davidson, J. E	Regulators	Aug. 15, 1893
503,487	Lawrence, W	Railways, systems, closed conduit	Aug. 15, 1893
503,505	Triunis, J. A	Railway signals, cab, sectional rail	Aug. 15, 1893
503,519	Bennett, D. T	Railways, conductor supports and insulators	Aug. 15, 1893
503,538	Howard, L. E	Lights arc, special features	Aug. 15, 1893
503,539	Howard, L. E	do	Aug. 15, 1893
503,549	McCarthy, L	Insulators	Aug. 15, 1893
503,555	Scribner, C. E	Telephones, switch-board	Aug. 15, 1893
503,562	Clark, J. W	Railways, overhead, trolleys	Aug. 15, 1893
503,567	Bates, J. M	Railways, systems, closed conduit	Aug. 15, 1893
503,568	Adams, A. D	Motors, hand-operating devices	Aug. 22, 1893
503,570	Allison, J. H	Railways, systems, overhead, trolleys	Aug. 22, 1893
503,574	Bradley, C. S	Magneto-electric	Aug. 22, 1893
504,581	Diehl, P	do	Aug. 22, 1893
503,589	Evershed, S	Batteries, galvanic	Aug. 22, 1893
503,590	Field, S. D	Telegraphy, reed	Aug. 22, 1893
503,595	Gregory, F. L	Meters	Aug. 22, 1893
503,602	Hunter, R. M	Lamps and gas fittings, head lights	Aug. 22, 1893
503,604	Kellogg, M. G	Conductors	Aug. 22, 1893
503,621	Shallenberger, O. B	Systems of distribution	Aug. 22, 1893
503,622	Stanley, W. jr	do	Aug. 22, 1893
503,650	Cary, E. E. and Nickerson, W. E	Lights, incandescent	Aug. 22, 1893
503,669	Cary, E. E. and Nickerson, W. E	do	Aug. 22, 1893
503,670	Cary, E. E. and Nickerson, W. E	do	Aug. 22, 1893
503,671	Cary, E. E. and Nickerson, W. E	do	Aug. 22, 1893
503,690	Wheeler, S. S	Motors, hand-operating devices	Aug. 22, 1893
503,693	Blasser, E	Lights, incandescent, special features	Aug. 22, 1893
503,709	Schwencke, C	Telegraphy, fire, variable signal, dial	Aug. 22, 1893
503,710	Warner, A	Railways, systems, conduit	Aug. 22, 1893
503,712	Banta, W. E	Conductors	Aug. 22, 1893
503,718	Frischen, J. H	Railway signals, block system	Aug. 22, 1893
503,749	McCarty, L	Railways, conductor supports and insulators	Aug. 22, 1893
503,750	Richardson, O. M	Regulators	Aug. 22, 1893



No.	NAME.	CLASS.	DATE.
503,770	Nickerson, W. E	Lights, incandescent	Aug. 22, 1893
503,775	Pritchard, J. K	Railways, systems, overhead, trolleys	Aug. 22, 1893
503,778	Trimble, W. D	Insulators	Aug. 22, 1893
503,788	Emmet, W. Le R	Telegraphy, lightning arresters	Aug. 22, 1893
503,799	Millard, W. W	Lights, arc, special features	Aug. 22, 1893
503,805	Reckenzaum, A	Meters	Aug. 22, 1893
503,867	Matson, L. B	Cut-outs, mechanical	Aug. 22, 1893
503,912	O'Neill, J. A	Lights, incandescent	Aug. 22, 1893
503,981	Orme, J	Railway signals, cab, sectional rail	Aug. 29, 1893
504,002	Turaid, L. J	Telegraphy, circuit closers, thermal	Aug. 29, 1893
504,042	Kinsman, F. E	Railway signals, cab, sectional rail	Aug. 29, 1893
504,095	Schweizer, E	Clocks, electric	Aug. 29, 1893
504,103	Colvin, F. R	Telephones, systems	Aug. 29, 1893
504,107	Conklin, J. S	Railways, systems, closed conduit	Aug. 29, 1893
504,113	Palmros, A	Railways, systems, overhead	Aug. 29, 1893
504,123	Dex, C. E	Cut-outs, mechanical, oscillating snap	Aug. 29, 1893
504,130	Libbey, H. W	Batteries, galvanic	Aug. 29, 1893
504,148	Berrigan, W. H	Telegraphy, circuit closers	Aug. 29, 1893
504,160	Herrick, A. P	Rheostats	Aug. 29, 1893
504,177	Sandherr, F. H	Magneto-electric	Aug. 29, 1893
504,196	Bradley, J. L	Telegraphy, fire, automatic	Aug. 29, 1893
504,200	Conkling, G	Mills, magnetic separators	Aug. 29, 1893
504,201	Conkling, G	do	Aug. 29, 1893
504,216	Henry, J. C	Regulators	Aug. 29, 1893
504,249	Scribner, C. E	Telephones, systems	Aug. 29, 1893
504,250	Scribner, C. E	do	Aug. 29, 1893
504,251	Scribner, C. E	do	Aug. 29, 1883
504,255	Sprague, F. J. and P. F. O	Railways, systems, overhead, trolleys	Aug. 29, 1893
504,271	Hunter, R. M	Lights, arc, gravity feed, clutch	Aug. 29, 1893
504,276	Nelson, J	Railways, conductor supports and insulators	Aug. 29, 1893
504,277	Phillips, W. A	Lights, arc, gravity feed, gear-clutch	Aug. 29, 1893
504,336	Enholm, W. C	Medical and surgical, body-wear	Sept. 5, 1893
504,334	Goodridge, W. M	Cut-outs, thermal	Sept. 5, 1893
504,345	Goodridge, W. M	Telephones, systems	Sept. 5, 1893
504,367	Rudd, C. H	Telegraphy, circuits and systems	Sept. 5, 1893
504,370	Silvey, W. L	Batteries, secondary	Sept. 5, 1893
504,379	Warner, E. P	Magneto-electric	Sept. 5, 1893
504,397	Marsh, J. W	Conductors	Sept. 5, 1893
504,398	Marsh, J. W	do	Sept. 5, 1893
504,401	Morrow, J. T	Magneto-electric	Sept. 5, 1893
504,405	Shaaber, M	Railways, systems, overhead, trolleys	Sept. 5, 1893
504,454	Parks, W	Telephones, electric	Sept. 5, 1893
504,455	Reed, C. J	Batteries, secondary	Sept. 5, 1893
504,462	Balsley, W. A	Telephones, switch-boards	Sept. 5, 1893
504,484	Amber, A. S	Railways, systems, batteries	Sept. 5, 1893
504,496	Lemp, H	Metal working	Sept. 5, 1893
504,497	Lemp, H	Regulators	Sept. 5, 1893
504,523	Gartsede, C. W. and Wood, R. E	Cut-outs, mechanical, oscillating snap	Sept. 5, 1893
504,528	Herrick, A. B	do	Sept. 5, 1893
504,542	Seagrave, F. E	Railway signals, cab, sectional rail	Sept. 5, 1893
504,549	Bidwell, B	Railways, systems, conduit	Sept. 5, 1893
504,630	Siemens, A	Motors alternating	Sept. 5, 1893
504,632	Spence, T	Lighting, systems	Sept. 5, 1893
504,636	Stromberg, A. and Carlson, A	Telephones, magnetic	Sept. 5, 1893
504,676	Flagg, S. H	Railways, systems, conduit	Sept. 5, 1893
504,681	Lewis, J. N	Lighting, systems, car	Sept. 5, 1893
504,734	Linville, S. P. and Hettmansperger, L. F	Telegraphy, printing, multiple wheel	Sept. 12, 1893
504,734	Maddox, J. P	Railways, systems, overhead, trolleys	Sept. 12, 1893
504,738	Marshall, N	Safety devices, manual	Sept. 12, 1893
504,738	Mount, F. W	Lighting, systems, hand regulators	Sept. 12, 1893
504,740	Patee, T. A	Friction generators	Sept. 12, 1893
504,741	Patterson, W. P	Recorders	Sept. 12, 1893
504,743	Perkins, C. G	Lights, sockets and keys	Sept. 12, 1893
504,745	Piggins, C. R	Telegraphy, circuit closers	Sept. 12, 1893
504,746	Von der Poppenbury, J	Batteries, galvanic	Sept. 12, 1893
504,751	Rudd, C. H	Lighting, systems, test	Sept. 12, 1893
504,752	Rudd, C. H	do	Sept. 12, 1893
504,753	Rudd, C. H	do	Sept. 12, 1893
504,754	Rudd, C. H	Galvanometers	Sept. 12, 1893
504,760	Snedekor, C. T	Lights, arc, special features	Sept. 12, 1893
504,774	Craney, T	Electrolysis, aqueous bath apparatus	Sept. 12, 1893
504,801	Brown, J. A	Telephones electric	Sept. 12, 1893
504,815	McManus, R.	Lights, filaments and carbons	Sept. 12, 1893
504,845	McManus, R.	do	Sept. 12, 1893
504,847	Oler, H. D	Railways, systems, conduit	Sept. 12, 1893
504,866	Davenport, F. W	Lights, incandescent, special features	Sept. 12, 1893
504,901	Bayles, R. N	Magneto-electric	Sept. 12, 1893

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504,914	Eldredge, R	Magneto-electric	Sept. 12, 1893
504,938	Herbert, N	Electro-magnetic	Sept. 12, 1893
504,980	Hall, C. K. and Lillard, W. B	Telegraphy, fire, automatic	Sept. 12, 1893
505,087	Booth, J. B. S. and Falconer, E. J	Telephones, magnetic	Sept. 19, 1893
505,097	Flint, B. F	Lighting, systems	Sept. 19, 1893
505,098	Flint, B. F	do	Sept. 19, 1893
505,123	O'Neill, J. J.	Insulators	Sept. 19, 1893
505,170	Ness, T. W	Telephones, switches	Sept. 19, 1893
505,183	Atwater, A. S	Lights, arc, non-feeding	Sept. 19, 1893
505,184	Atwater, A. S	Magneto-electric	Sept. 19, 1893
505,188	Carty, J. J	Telephones, systems	Sept. 19, 1893
505,204	Laurence, W	Railways, systems, overhead, trolleys	Sept. 19, 1893
505,207	Philbrick, O. P	Regulators	Sept. 19, 1893
505,215	Buffington, E. W	Insulators	Sept. 19, 1893
505,233	Schmid, C	Lights, arc, gravity feed, clutch	Sept. 19, 1893
505,241	Waterhouse, A. G	Lighting, systems, automatic regulation	Sept. 19, 1893
505,243	Bristol, W. H	Meters	Sept. 19, 1893
505,247	Kosiowski, W. T	Magneto-electric	Sept. 19, 1893
505,263	Burton, G. D. and Angell, E. E	Metal working	Sept. 19, 1893
505,270	Hicks, O. H. and Troy, R. F	Locks, electric	Sept. 19, 1893
505,271	Hicks, O. H. and Troy, R. F	do	Sept. 19, 1893
505,293	Hess, H. K	Recorders, manual	Sept. 19, 1893
505,346	Bierley, H. A	Lighting, systems	Sept. 19, 1893
505,351	Edwards, E. A	Lighting, systems, car	Sept. 19, 1893
505,370	Robinson, E. R	Railways, systems, closed conduit	Sept. 19, 1893
505,422	Gardner, J. M	Lights, sockets and keys	Sept. 19, 1893
505,457	Gibbs, L. T	Railways, conductor supports and insulators	Sept. 26, 1893
505,467	Kitsee, I	Batteries, secondary	Sept. 26, 1893
505,505	Bell, L	Regulators, alternating	Sept. 26, 1893
505,539	Strong, G. S	Magneto-electric	Sept. 26, 1893
505,561	Smith, W. I	Medical and surgical, electrodes	Sept. 26, 1893
505,594	Curtis, C. G	Motors	Sept. 26, 1893
505,605	McNear, G. W	Railways, systems, closed conduit	Sept. 26, 1893
505,622	Atwater, A. S	Magneto-electric	Sept. 26, 1893
505,628	Marshall, W	Telephones, systems	Sept. 26, 1893
505,665	Lundell, R	Magneto-electric	Sept. 26, 1893
505,686	Warner, E. P	Motors, hand operating devices	Sept. 26, 1893
505,729	Sherwood, W. J	Magneto-electric	Sept. 26, 1893
505,730	Spenser, T	Telephones, systems	Sept. 26, 1893
505,783	Ashley, R	Magneto-electric	Sept. 26, 1893
505,798	Bell, O. A	Telephones, switch-board	Sept. 26, 1893
505,808	Beland, T	Lighting, systems	Oct. 3, 1893
505,819	Downs, H. T	Annunciators, step-by-step	Oct. 3, 1893
505,822	Egner, F	Lighting, systems	Oct. 3, 1893
505,833	Kinsman, F. E	Railway signals, sectional rail	Oct. 3, 1893
505,834	Kinsman, F. E	Telegraphy, circuit closers, thermal	Oct. 3, 1893
505,841	McCarthy, L	Railways, systems, closed conduit	Oct. 3, 1893
505,859	Stanley, W. and Kelley, J. T	Motors, alternating	Oct. 3, 1893
505,860	Stanley, W. and Kelley, J. T	do	Oct. 3, 1893
505,911	Wurts, A	Rheostats	Oct. 3, 1893
505,912	Wurts, A	Insulators	Oct. 3, 1893
505,913	Burnett, H. D. and Doane, S. E	Lights, incandescent	Oct. 3, 1893
505,914	Elkins, W. H	Regulators	Oct. 3, 1893
505,926	Schmid, A	Magneto-electric	Oct. 3, 1893
505,927	Schmid, A	do	Oct. 3, 1893
505,928	Scott, C. F	Systems of distribution	Oct. 3, 1893
505,957	Rahner, M	Magneto-electric	Oct. 3, 1893
505,994	Sperry, E. A	Railways, systems, overhead, trolleys	Oct. 3, 1893
506,001	Coldren, W. P	Motors, hand operating devices	Oct. 3, 1893
506,002	Cousens, A. C	Insulators	Oct. 3, 1893
506,034	Burtshaell, S. W	Lights, incandescent, special features	Oct. 3, 1893
506,066	Opperman, J	Galvanometers	Oct. 3, 1893
506,092	Billbery, C. O. C	Rheostats	Oct. 3, 1893
506,124	Lewis, H. A	Railways, systems	Oct. 3, 1893
506,149	Binford, E. R	Railways, systems, overhead	Oct. 3, 1893
506,169	Esmond, E. R	Elevators	Oct. 3, 1893
506,208	Davis, J. A. and Fowden, R. A	Telegraphy, printing	Oct. 10, 1893
506,209	Davis, J. A. and Fowden, R. A	do	Oct. 10, 1893
506,223	Gold, J. S	Telephones, supports	Oct. 10, 1893
506,223	Kinsman, F. E	Lighting, systems, car	Oct. 10, 1893
506,269	Sheehy, R. J	Telegraphy, printing	Oct. 10, 1893
506,270	Sheehy, R. J	do	Oct. 10, 1893
506,271	Sheehy, R. J	do	Oct. 10, 1893
506,272	Sheehy, R. J	do	Oct. 10, 1893
506,273	Sheehy, R. J	do	Oct. 10, 1893
506,274	Sheehy, R. J	Telegraphy, multiple wheel	Oct. 10, 1893
506,275	Sheehy, R. J	Telegraphy, automatic	Oct. 10, 1893



No.	NAME.	CLASS.	DATE.
506,282	Timmis, I. A	Electro-magnets	Oct. 10, 1893
506,294	Willoughby, C	Telegraphy, transmitters	Oct. 10, 1893
506,297	Alexander, W. W	Cut-outs, mechanical	Oct. 10, 1893
506,305	Brown, J. A	Telephones, magnetic	Oct. 10, 1893
506,311	Fessenden, R. A	Conductors	Oct. 10, 1893
506,312	Harris, S	Railways, systems, overhead	Oct. 10, 1893
506,347	Struble, C. B	Igniting devices, manual	Oct. 10, 1893
506,353	Wheelock, B. J	Batteries, galvanic	Oct. 10, 1893
506,358	Brauth, J. F. S	Electric locomotives	Oct. 10, 1893
506,367	Hochhausen, W	Elevators	Oct. 10, 1893
506,383	Thomson, E	Cut-outs, thermal	Oct. 10, 1893
506,415	Capek, J. V	Telephones, electric	Oct. 10, 1893
506,449	Silsbee, S	Medical and surgical	Oct. 10, 1893
506,459	Ball, R. E	Lights, filaments and carbons	Oct. 10, 1893
506,463	Benjamin, G. H	Railways, systems, overhead, trolleys	Oct. 10, 1893
506,481	Elieson, C. P	Motors	Oct. 10, 1893
506,482	Elkins, W. H	Regulators	Oct. 10, 1893
506,503	Hoffmann, C	Lights, arc, gravity feed, gear-clutch	Oct. 10, 1893
506,516	Lane, L	Medical and surgical, electrodes	Oct. 10, 1893
506,563	Stevens, F	Cut-outs, mechanical, oscillating snaps	Oct. 10, 1893
506,577	Adams, J. M. and M	Inductoriums, stationary	Oct. 10, 1893
506,582	Brown, G. W	Telegraphy, fire, automatic	Oct. 10, 1893
506,617	Anderson, J. M	Railways, systems, overhead, trolleys	Oct. 10, 1893
506,627	Cousens, A. C	Telephones, electric	Oct. 10, 1893
506,646	Dorenwend, C. H	Telephones, details	Oct. 10, 1893
506,650	Lacombe, J. M	Lights, filaments and carbons	Oct. 10, 1893
506,658	Berthon, L. A	Telephones, systems, multiple switch-board, test.	Oct. 17, 1893
506,700	Kiehe, J. S	Telegraphy, fire, alarms and extinguishers	Oct. 17, 1893
506,716	McNellies, C	Lights, arc, gravity feed, clutch	Oct. 17, 1893
506,729	Rex, B. F	Telegraphy, circuit closers	Oct. 17, 1893
506,733	Berge, H. and F. G. A	Lights, incandescent	Oct. 17, 1893
506,740	Short, S. H	Magneto-electric	Oct. 17, 1893
506,774	Feldkamp, F. A	do	Oct. 17, 1893
506,775	Feldkamp, F. A	do	Oct. 17, 1893
506,786	Libbey, H. W	Electric locomotives	Oct. 17, 1893
506,830	Requa, L. F	Conductors	Oct. 17, 1893
506,841	Bulen, G. F	Telegraphy, fire, alarms and extinguishers	Oct. 17, 1893
506,881	Keller, J	Regulators	Oct. 17, 1893
506,883	Perrin, F. S	Annunciators, drop	Oct. 17, 1893
506,884	Pickernell, F. A	Telegraphy, anti-induction devices	Oct. 17, 1893
506,890	Utzinger, A	Lights, arc, positive feed, gear-clutch	Oct. 17, 1893
506,920	Mailloux, C. O. and Barston, W. S	Lighting, systems, hand regulation	Oct. 17, 1893
506,921	Mailloux, C. O. and Barston, W. S	do	Oct. 17, 1893
506,973	Buck, L. P. and Sweeten, F. D	Telegraphy, printing	Oct. 17, 1893
506,993	Franklin, H. H	Railways, systems, conduit	Oct. 17, 1893
507,125	Herrick, A. B	Railway signals, cab, sectional rail	Oct. 24, 1893
507,139	Kennedy, C. W	Batteries, secondary	Oct. 24, 1893
507,144	Lundell, R	Motors, hand operating devices	Oct. 24, 1893
507,147	Mackie, R	Telephones, calls, step-by-step	Oct. 24, 1893
507,148	Mackie, R	do	Oct. 24, 1893
507,150	Miller, L. W	Cut-outs, mechanical	Oct. 24, 1893
507,170	Rupel, J. M	Telegraphy, railway car	Oct. 24, 1893
507,194	Wood, J. J	Magneto-electric	Oct. 24, 1893
507,205	Bogart, S. S	Telephones, calls, step-by-step	Oct. 24, 1893
507,206	Bogart, S. S	do	Oct. 24, 1893
507,217	Coombs, C. L	Heaters	Oct. 24, 1893
507,247	Thompson, C. H	Railways, systems, overhead, trolleys	Oct. 24, 1893
507,257	Brown, H. H	Conductors	Oct. 24, 1893
507,297	Wilkes, G	Magneto-electric	Oct. 24, 1893
507,293	Willinghaus, W	Medical and surgical	Oct. 24, 1893
507,299	Williams, M. S	Railways, conductor supports and insulators	Oct. 24, 1893
507,322	Holmes, A. R	Telegraphy, fire, automatic	Oct. 24, 1893
507,339	Weir, R	Railways, systems, closed conduit	Oct. 24, 1893
507,343	Wood, J. J	Lights, arc, special features	Oct. 24, 1893
507,344	Wood, J. J	Magneto-electric	Oct. 24, 1893
507,345	Wood, J. J	Rheostats	Oct. 24, 1893
507,364	Hiler, G. P	Lights, incandescent, special features	Oct. 24, 1893
507,374	Lyte, F. M	Electrolysis, aqueous bath, chemicals	Oct. 24, 1893
507,391	Stanley, W., jr., and Kelly, J. F	Systems of distribution	Oct. 24, 1893
507,396	Wilson, J. F	Electric locomotives	Oct. 24, 1893
507,403	Bell, C	Connectors	Oct. 24, 1893
507,419	Coffin, C. L	Metal working	Oct. 24, 1893
507,424	Ford, W. S. and Lenfest, A	Telephones, switch-boards	Oct. 24, 1893
507,449	Fils, H. P	Motors, reciprocating	Oct. 24, 1893
507,493	Green, G. F	Railways, systems, conduit	Oct. 24, 1893
507,518	Leonard, M. B	Railway signals, block system	Oct. 24, 1893

No.	NAME.	CLASS.	DATE.
507,522	Ayton, C. W.	Steering and propulsion	Oct. 31, 1893
507,526	Carstarphen, W. P.	Inductoriums, transformers, stationary	Oct. 31, 1893
507,539	Heston, W.	Railways, systems, overhead, trolleys	Oct. 31, 1893
507,547	Knight, A. P.	Motors, hand operating devices	Oct. 31, 1893
507,554	Nickerson, W. E.	Lights, incandescent	Oct. 31, 1893
507,555	Nickerson, W. E.	do	Oct. 31, 1893
507,556	Nickerson, W. E.	do	Oct. 31, 1893
507,557	Nickerson, W. E.	do	Oct. 31, 1893
507,558	Nickerson, W. E.	do	Oct. 31, 1893
507,568	Stone, J. S.	Telephones, systems	Oct. 31, 1893
507,569	Stovey, F. G.	Alarms, burglar	Oct. 31, 1893
507,589	McEvoy, J. H.	Car brakes	Oct. 31, 1893
507,606	Woods, G. T.	Railways, closed conduit	Oct. 31, 1893
507,629	Morgan, E. C.	Motors, reciprocating	Oct. 31, 1893
507,641	Akarman and Le Noir	Railways, systems, overhead	Oct. 31, 1893
507,658	Kelly and Chesney	Motors, alternating	Oct. 31, 1893
507,660	Krastin, A.	Telegraphy, circuit closers	Oct. 31, 1893
507,671	Boehlen, R.	Motors, reciprocating	Oct. 31, 1893
507,689	Ricker, A. L.	Magneto-electric	Oct. 31, 1893
507,690	Ricker, A. L.	do	Oct. 31, 1893
507,691	Robinson, M.	Lighting, systems, test	Oct. 31, 1893
507,694	Stone, J. S.	Telephones, systems, central	Oct. 31, 1893
507,708	Gregg, J. A. S.	Batteries, galvanic	Oct. 31, 1893
507,714	Marten, A. S.	Lamp and gas fittings, shade supports	Oct. 31, 1893
507,715	Mason, J. H.	Telephones, electric	Oct. 31, 1893
507,728	Field, S. D.	Telephones, magnetic	Oct. 31, 1893
507,732	Huben, G. A.	Railways, systems, overhead	Oct. 31, 1893
507,733	Huben, G. A.	Railways, systems, overhead, trolleys	Oct. 31, 1893
507,791	Delaney, P. B.	Telegraphy, automatic	Oct. 31, 1893
507,803	Goldkind and Stern	Lighting, ceiling block	Oct. 31, 1893
507,867	Willibrant, H.	Lights, arc, positive feed, clutch	Oct. 31, 1893
507,916	La Boiteaux, F. M.	Magnetizing	Oct. 31, 1893
507,917	Luce, W. B.	Lights, arc, gravity feed, gear-clutch	Oct. 31, 1893
507,918	Miller, G. E.	Railway signals, cab, sectional rail	Oct. 31, 1893
507,925	Patty, T. S.	Bells	Oct. 31, 1893
507,941	Snee, W.	Heaters	Oct. 31, 1893
507,945	Van Depoele, C. J.	Transmission of power	Oct. 31, 1893
507,946	Van Depoele, C. J.	Motors, reciprocating	Oct. 31, 1893
507,959	Wyman, C. T.	Time alarms	Oct. 31, 1893
507,978	Arnold, C. R.	Lights, incandescent	Nov. 7, 1893
507,983	Bell, O. A.	Telephones, systems, multiple switch-board, divided central.	Nov. 7, 1893
507,997	Conklin, J. S.	Electric locomotives	Nov. 7, 1893
508,000	Davidson, J. C.	Transmission of power	Nov. 7, 1893
508,050	Richardson, C. H.	Motors, reciprocating	Nov. 7, 1893
508,054	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Nov. 7, 1893
508,068	Walch, G. T.	Lightning rods	Nov. 7, 1893
508,083	Brain, C. T. B.	Railways, systems, closed conduit	Nov. 7, 1893
508,091	Cutten, E. B.	Electrolysis, aqueous bath, anodes	Nov. 7, 1893
508,104	Goreham, H. A.	Railways, systems, conduit	Nov. 7, 1893
508,129	Carstarphen, W. P.	Motors	Nov. 7, 1893
508,188	Stanley, W. Jr.	Motors, alternating	Nov. 7, 1893
508,199	Benton, O. B.	Railways, systems, closed conduit	Nov. 7, 1893
508,208	Cullingworth, A. M.	Regulators	Nov. 7, 1893
508,214	Frank, J. R.	Telegraphy, keys	Nov. 7, 1893
508,215	Gerry, J. H.	Clocks, electric	Nov. 7, 1893
508,241	Richardson, J. C.	Electrolysis, aqueous bath, chemicals	Nov. 7, 1893
508,255	Stone, J. S.	Telephones, systems	Nov. 7, 1893
508,262	Williams, G. H.	Motors, reciprocating	Nov. 7, 1893
508,284	Coffin, C. L.	Heaters, electric	Nov. 7, 1893
508,295	Fisher, H. W.	Conductors	Nov. 7, 1893
508,314	Hill, C. C.	Lighte, arc, special features	Nov. 7, 1893
508,322	Jones, W. N.	Motors, hand operating devices	Nov. 7, 1893
508,344	Rivenburgh, A.	Lights, incandescent, special features	Nov. 7, 1893
508,370	Connor, W. A.	Conductors	Nov. 7, 1893
508,392	Adair and Kluver	Lights, arc, gravity feed, clutch	Nov. 7, 1893
508,422	Hornberger, W. H.	Inductoriums, transformers, stationary	Nov. 14, 1893
508,482	Mayr, G.	Lights, incandescent, special features	Nov. 14, 1893
508,489	Scott, C. F.	Magneto-electric, connecting devices	Nov. 14, 1893
508,493	Stanley, W. Jr.	Regulators	Nov. 14, 1893
508,538	Chase, J.	Railways, systems, overhead, trolleys	Nov. 14, 1893
508,539	Field, S. D.	do	Nov. 14, 1893
508,551	Mills, W.	Batteries, galvanic	Nov. 14, 1893
508,559	Willard, T. A.	Batteries, secondary	Nov. 14, 1893
508,563	Christie, S. E.	Telegraphy, fire	Nov. 14, 1893
508,587	Trumbull, G. A.	Connectors	Nov. 14, 1893



No.	NAME.	CLASS.	DATE.
508,613	Henry, J. C.	Conductors, underground	Nov. 14, 1893
508,614	Henry, J. C.	Recorders, speed	Nov. 14, 1893
508,615	Henry, J. C.	Railways, systems, overhead	Nov. 14, 1893
508,616	Henry, J. C.	Lighting, systems	Nov. 14, 1893
508,622	Knight, W. H.	Railways, systems, overhead	Nov. 14, 1893
508,623	Knowles, E. R.	Lights, arc, special features	Nov. 14, 1893
508,624	Knowles, E. R.	Magneto-electric	Nov. 14, 1893
508,625	Knowles and Park	Lighting, systems	Nov. 14, 1893
508,626	Knowles, E. R.	Lighting, systems, hand regulation	Nov. 14, 1893
508,629	Offrell, O.	Lighting, ceiling block	Nov. 14, 1893
508,632	Potter, W. B.	Telegraphy, lightning arresters	Nov. 14, 1893
508,633	Priest, E. D.	Motors	Nov. 14, 1893
508,634	Priest, E. D.	Magneto-electric	Nov. 14, 1893
508,636	Reist and Fiske	do	Nov. 14, 1893
508,637	Reist, H. G.	do	Nov. 14, 1893
508,638	Rice, E. W.	Regulators, alternating	Nov. 14, 1893
508,642	Rohrer, A. L.	Lights, arc, special features	Nov. 14, 1893
508,644	Swan, A.	Cut-outs, thermal	Nov. 14, 1893
508,646	Thomson, E.	Systems of distribution	Nov. 14, 1893
508,647	Thomson, E.	Lighting, systems	Nov. 14, 1893
508,648	Thomson, E.	Telegraphy, lightning arresters	Nov. 14, 1893
508,649	Thomson, E.	do	Nov. 14, 1893
508,650	Thomson, E.	Inductoriums, transformers, stationary	Nov. 14, 1893
508,651	Thomson, E.	Magneto-electric	Nov. 14, 1893
508,652	Thomson, E.	Electro-magnetic	Nov. 14, 1893
508,653	Thomson, E.	Insulating compound	Nov. 14, 1893
508,654	Thomson, E.	Inductoriums, transformers, stationary	Nov. 14, 1893
508,655	Thomson, E.	do	Nov. 14, 1893
508,656	Thomson, E.	Lights, arc, positive feed	Nov. 14, 1893
508,657	Thomson, E.	Regulators, alternating	Nov. 14, 1893
508,658	Thomson, E.	Regulators	Nov. 14, 1893
508,659	Thomson, E.	Lights, incandescent	Nov. 14, 1893
508,660	Thomson, E.	Meters	Nov. 14, 1893
508,661	Thomson, E.	do	Nov. 14, 1893
508,662	Thomson, E.	Galvanometers	Nov. 14, 1893
508,665	Wirt, H. C.	Cut-outs, thermal	Nov. 14, 1893
508,669	Bassett, N. C.	Railways, systems, overhead	Nov. 14, 1893
508,926	Federmann, P.	Lights, arc, special features	Nov. 21, 1893
509,946	Karr and Bradrick	Railway signals, cab, sectional rail	Nov. 21, 1893
509,002	Vail, J. H.	Railways, systems, circuit, multiple arc	Nov. 21, 1893
509,014	Ball, H. P.	Lights, arc, gravity feed, clutch	Nov. 21, 1893
509,036	Johnson, E. H.	Cut-outs, thermal	Nov. 21, 1893
509,050	Schweiger, W. J.	Bells	Nov. 21, 1893
509,061	Weber and Weber	Telephones, supports	Nov. 21, 1893
509,065	Woods, G. T.	Railways, systems, closed conduit	Nov. 21, 1893
509,066	Wooten, J. P.	Telegraphy, printing	Nov. 21, 1893
509,072	Dale, J. H.	Railways, systems, closed conduit	Nov. 21, 1893
509,085	Jenne and Willey	Igniting devices, manual	Nov. 21, 1893
509,093	Patenall, T. H.	Railway signals	Nov. 21, 1893
509,095	Perry, J.	Meters	Nov. 21, 1893
509,116	Callahan, F.	Telegraphy, fire, engine-house apparatus	Nov. 21, 1893
509,123	Fuller, J. T.	Railways, systems, overhead, trolleys	Nov. 21, 1893
509,167	Hunter, R. M.	Lights, arc, special features	Nov. 21, 1893
509,168	Hunter, R. M.	Lights, arc, gravity feed, clutch	Nov. 21, 1893
509,171	Kirnan, W. H.	Recorders	Nov. 21, 1893
509,186	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Nov. 21, 1893
509,188	Ward, B. B.	Lights, arc, gravity feed, gear-clutch	Nov. 21, 1893
509,201	Crabtree, L. T.	Railway signals	Nov. 21, 1893
509,216	Gaynor, T. F.	Telegraphy, fire, repeaters	Nov. 21, 1893
509,217	Gaynor, T. F.	Recorders	Nov. 21, 1893
509,218	Gaynor, T. F.	Telegraphy, fire, variable signal	Nov. 21, 1893
509,219	Gaynor, T. F.	Telegraphy, fire, non-interfering	Nov. 21, 1893
509,244	Parrish, H. A.	Railway signals, sectional rail	Nov. 21, 1893
509,266	Usher, E. P.	Batteries, secondary	Nov. 21, 1893
509,267	Usher, E. P.	do	Nov. 21, 1893
509,268	Usher, E. P.	do	Nov. 21, 1893
509,269	Usher, E. P.	do	Nov. 21, 1893
509,270	Usher, E. P.	do	Nov. 21, 1893
509,271	Usher, E. P.	do	Nov. 21, 1893
509,272	Usher, E. P.	do	Nov. 21, 1893
509,279	Allen, H. A.	Motors, hand operating devices	Nov. 21, 1893
509,290	Boughton, C. V.	Telegraphy, circuits and systems	Nov. 21, 1893
509,297	Bryant, W. C.	Lights, sockets and keys	Nov. 21, 1893
509,311	Henry, J. C.	Electric locomotives	Nov. 21, 1893
509,312	Henry, J. C.	Railways, systems, closed conduit	Nov. 21, 1893
509,322	Morgan, W. H.	Motors, hand operating devices	Nov. 21, 1893

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509,328	Ricke, G. H	Railways, conductor supports and insulators	Nov. 21, 1893
509,363	Clark, J. H	Motors, hand-operating devices	Nov. 28, 1893
509,367	Dunbar and Dunbar	Telephones, systems, multiple switch-board, test.	Nov. 28, 1893
509,381	Jordan, L. F	Batteries, galvanic	Nov. 28, 1893
509,397	Pratt, C. R	Elevators	Nov. 28, 1893
509,403	Von Siemens, G. W	Railways, systems, closed conduit	Nov. 28, 1893
509,421	Wörmer, A	do	Nov. 28, 1893
509,430	Fowden, R. A	Telegraphy, printing, wheel	Nov. 28, 1893
509,443	McGiffert, J. B	Lighting, systems, hand regulation	Nov. 28, 1894
509,445	Nowotny, J. S	Inductariums, induction coils	Nov. 28, 1893
509,447	Pellat, J. S. H	Railway signals	Nov. 28, 1893
509,475	Knight, W. H	Regulators	Nov. 28, 1893
509,477	May, E. S. C	Telephones, systems, multiple switch-board, divided central.	Nov. 28, 1893
509,484	O'Connell, J. J	Telephones, switches	Nov. 28, 1893
509,486	Parshall, H. F	Regulators	Nov. 28, 1893
509,499	Thomson, E	do	Nov. 28, 1893
509,500	Werline, H. E	Lighting, ceiling block	Nov. 28, 1893
509,501	Werline, H. E	do	Nov. 28, 1893
509,502	Werline, H. E	Shade supports	Nov. 28, 1893
509,505	Weight and Kinsey	Motors, hand-operating devices	Nov. 28, 1893
509,517	Edison, T. A	Regulators	Nov. 28, 1893
509,518	Edison, T. A	Railways, systems, converters	Nov. 28, 1893
509,524	Gill, J. B	Telegraphy, fire, variable signal, dial	Nov. 28, 1893
509,530	Harrison, W. S	Telephones, switches	Nov. 28, 1893
509,539	Klein, C. J	Telegraphy, circuit closers	Nov. 28, 1893
509,545	McIntosh, G. M	Bells	Nov. 28, 1893
509,573	Gardiner, J. M	Telegraphy, fire, non-interfering	Nov. 28, 1893
509,578	Lintner, G. A	Galvanometers	Nov. 28, 1893
509,603	Noll, A	Conductors	Nov. 28, 1893
509,614	Dey, C. H	Railways, conductor supports and insulators	Nov. 28, 1893
509,616	Gates, E. B	do	Nov. 28, 1893
509,620	Hitt, S. E	Magneto-electric	Nov. 28, 1893
509,622	Johnson, E. H	Railways, systems, conduit	Nov. 28, 1893
509,651	Chabeauet, E.	Railways, systems, closed conduit	Nov. 28, 1893
509,662	Hoffmann, C	Magneto-electric	Nov. 28, 1893
509,680	Rabidge, P	Telephones, calls	Nov. 28, 1893
509,705	Threlfall, R	Motors, reciprocating	Nov. 28, 1893
509,713	Adams, N. F	Cut-outs, thermal	Nov. 28, 1893
509,750	Mottram, W. T. M	Meters	Nov. 28, 1893
509,776	Sperry, E. A	Motors, hand-operating devices	Nov. 28, 1893
509,783	Wurts, A	Telegraphy, lightning arresters	Nov. 28, 1893
509,784	Wurts, A	do	Nov. 28, 1893
509,821	Perkins, F. B	Elevators	Nov. 28, 1893
509,842	Clark, E. P	Lights, arc, gravity feed, gear-clutch	Nov. 28, 1893
509,867	Brady, C. G	Telephones, systems, details	Dec. 5, 1893
509,873	Burns, M. J	Telegraphy, fire, variable signal, dial	Dec. 5, 1893
509,932	McBerty, F. R	Telephones, systems, multiple switch-board, test.	Dec. 5, 1893
509,953	Scribner, C. E	Regulators	Dec. 5, 1893
509,954	Scribner, C. E	do	Dec. 5, 1893
509,955	Scribner, C. E	do	Dec. 5, 1893
509,956	Scribner, C. E	Annunciators	Dec. 5, 1893
509,964	Steiner, J	Telegraphy, keys	Dec. 5, 1893
509,965	Stoone, J. S	Telephones, systems	Dec. 5, 1893
509,985	Weyrick, O	Telegraphy, circuit closers	Dec. 5, 1893
510,002	Delany, P. B	Telegraphy, circuits and systems	Dec. 5, 1893
510,003	Delany, P. B	do	Dec. 5, 1893
510,004	Delany, P. B	do	Dec. 5, 1893
510,005	Delany, P. B	Telegraphy, automatic	Dec. 5, 1893
510,006	Delany, P. B	do	Dec. 5, 1893
510,007	Delany, P. B	Telegraphy, circuits and systems	Dec. 5, 1893
510,018	Green, H	Lights, incandescent	Dec. 5, 1893
510,048	Prepes, O. H	Dental instruments	Dec. 5, 1893
510,059	Beard, A. H	Motors	Dec. 5, 1893
510,061	De Voe, W. R	Railways, systems, conduit	Dec. 5, 1893
510,074	Louis, O. F	Galvanometers	Dec. 5, 1893
510,095	Seavey, G. T	Shade supports	Dec. 5, 1893
510,102	Thiel, H. K	Magneto-electric	Dec. 5, 1893
510,115	Cantrell, M. C	Telegraphy, circuits and systems, thermal	Dec. 5, 1893
510,142	Just, P. C	Railways, systems, conduit	Dec. 5, 1893
610,156	Burry, J	Telegraphy, relays and sounders	Dec. 5, 1893
510,177	Jewell, E. W	Galvanometers	Dec. 5, 1893
510,188	Pennock, G. B	Lighting, systems	Dec. 5, 1893
510,195	Seodniko, J	Telephones, systems, automatic	Dec. 5, 1893
510,201	Smart, D. V. B	Railways, systems, overhead	Dec. 5, 1893



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510,209	Thorn, C., jr	Telegraphy, duplex	Dec. 5, 1893
510,217	Walker, J. E	Railways, conductor supports and insulators	Dec. 5, 1893
510,260	Heigham, D	Lighting, systems, automatic regulation	Dec. 5, 1893
510,303	Thompson, L. E	Lights, arc, special features	Dec. 5, 1893
510,317	Berry, C. M	Lights, incandescent, special features	Dec. 5, 1893
510,320	Boardman, A. T	Telephones, systems, details	Dec. 5, 1893
510,367	Roe, A. R	Motors, reciprocating	Dec. 5, 1893
510,417	Fiske, B. A	Indicators	Dec. 12, 1893
510,418	Fiske, B. A	Distance instruments	Dec. 12, 1893
510,430	Kirke, W. R	Telegraphy, circuits and systems	Dec. 12, 1893
510,457	Whitehall, and Whitehall	Annunciators, step-by-step	Dec. 12, 1893
510,460	Wilson, D. H	Magneto-electric	Dec. 12, 1893
510,465	Bell, L	Regulators, alternating	Dec. 12, 1893
510,466	Bennett, E. H	Motors	Dec. 12, 1893
510,472	Eikenmeyer, R	Magneto-electric	Dec. 12, 1893
510,484	Pfouts, L. S	Dental instruments	Dec. 12, 1893
510,485	Pfouts, L. S	Railways, conductor supports and insulators	Dec. 12, 1893
510,487	Rice, E. W., jr	Lighting, systems, hand regulation	Dec. 12, 1893
510,508	Holman, S. W	Telegraphy, circuits and systems	Dec. 12, 1893
510,533	Gibbs, J. S	Cut-outs, mechanical, rotary	Dec. 12, 1893
510,534	Gorges, J. H. T	Motors	Dec. 12, 1893
510,540	Hunter, R. M	Telegraphy, circuit closers	Dec. 12, 1893
510,596	Germaum, J. G	Motors	Dec. 12, 1893
510,601	Hochhausen, W	Motors, alternating	Dec. 12, 1893
510,602	Hunter, R. M	Railways, systems	Dec. 12, 1893
510,603	Johnson, A. H	Railway signals, sectional rail	Dec. 12, 1893
510,604	Johnson, L. F	Batteries, galvanic	Dec. 12, 1893
510,605	Kesler, J. F	Lights, arc, gravity feed, gear-clutch	Dec. 12, 1893
510,612	Reed, C. J	Telegraphy, circuits and systems	Dec. 12, 1893
510,613	Reed, C. J	Conductors, anti-inductive	Dec. 12, 1893
510,634	De Voe, W. R	Railways, systems, conduit	Dec. 12, 1893
510,640	Hornberger, W. H	Inductoriums, transformers, stationary	Dec. 12, 1893
510,646	Mayhew, C. L	Cut-outs, electro-magnetic	Dec. 12, 1893
510,647	Michieli, J. P	Railways, systems, conduit	Dec. 12, 1893
510,661	Winkler, C. F	Electric locomotives	Dec. 12, 1893
510,662	Winkler, C. F	Motors	Dec. 12, 1893
510,663	Wollensark, J. F	Telegraphy, circuit closers	Dec. 12, 1893
510,862	Hoffmann, C	Magneto-electric	Dec. 12, 1893
510,863	Jacques, W. W	Telephones, systems, multiple switch-board, test.	Dec. 12, 1893
11,395	Hart, G. W	Cut-outs, mechanical, rotary	Dec. 12, 1893
510,892	Coffman, J. R	Magneto-electric	Dec. 19, 1893
510,898	Curtis, F. G	Connectors	Dec. 19, 1893
510,899	Cutten, E. B	Electrolysis, aqueous bath, anodes	Dec. 19, 1893
510,900	Cutten, E. B	Electrolysis, aqueous bath, chemical	Dec. 19, 1893
510,901	Cutten, E. B	Electrolysis, aqueous bath, anodes	Dec. 19, 1893
510,902	Cutten, E. B	do	Dec. 19, 1893
510,929	Parker and Summers	Telegraphy, automatic	Dec. 19, 1893
510,932	Perret, T. A	Motors, hand-operating devices	Dec. 19, 1893
510,947	Winkler, C. F	Electric locomotives	Dec. 19, 1893
510,952	Averill, F. E	Magneto-electric	Dec. 19, 1893
511,005	Weston, E	Telegraphy, relays and sounders	Dec. 19, 1893
511,017	Hendrix, W. W	Railways, systems, overhead	Dec. 19, 1893
511,018	Hendrix, W. W	Railways, systems, overhead, trolleys	Dec. 19, 1893
511,019	Hendrix, W. W	do	Dec. 19, 1893
511,049	Homel, A	Lights, arc, gravity feed, clutch	Dec. 19, 1893
511,081	Hunter, R. M	Telegraphy, automatic	Dec. 19, 1893
511,118	Brown, J. A	Telephones, magnetic	Dec. 19, 1893
511,131	Espinso, J. O. Y	Railway signals, cab, sectional rail	Dec. 19, 1893
511,157	Packard, W. D	Motors, hand-operating devices	Dec. 19, 1893
511,159	Poppowitsch, E	Batteries, galvanic	Dec. 19, 1893
511,163	Sachs, J	Railway signals	Dec. 19, 1893
511,172	Stinde, M. E	Telegraphy, transmitters	Dec. 19, 1893
511,173	Stone and Webster	Railways, systems	Dec. 19, 1893
511,187	Barber, E. A	Regulators	Dec. 19, 1893
511,188	Barnard, G. L	Alarms	Dec. 19, 1893
511,196	Conklin, O. F	Motors	Dec. 19, 1893
511,214	Robinson and Perkins	Magneto-electric	Dec. 19, 1893
511,229	Zobel, A	Lights, incandescent	Dec. 19, 1893
511,234	Conrad, A. F	Telegraphy, transmitters	Dec. 19, 1893
511,240	Hinds, J. L	Cut-outs, mechanical, oscillating snap	Dec. 19, 1893
511,244	Medina, F. B	Telegraphy, relays and sounders	Dec. 19, 1893
511,245	Mestern, M	Batteries, thermal	Dec. 19, 1893
511,259	Weller, F. A	Rheostats	Dec. 19, 1893
511,276	Pickernell, F. A	Telephones, systems, multiple switch-board	Dec. 19, 1893
511,286	Benecke, A. O	Rheostats	Dec. 19, 1893
511,323	Emery, C. E	Magneto-electric	Dec. 26, 1893

No.	NAME.	CLASS.	DATE.
511,342	Love, J. C.	Railways, systems, overhead	Dec. 26, 1893
511,343	Love, J. C.	do	Dec. 26, 1893
411,344	Love, J. C.	Railways, conductor supports and insulators	Dec. 26, 1893
511,345	Love, J. C.	do	Dec. 26, 1893
511,346	Love, J. C.	Railways, systems, conduit	Dec. 26, 1893
511,347	Marty, J.	Regulators	Dec. 26, 1893
511,358	Pickering, B.	Telephones, magnetic	Dec. 26, 1893
511,375	Thomson, E.	Regulators	Dec. 26, 1893
511,376	Thomson, E.	Galvanometers	Dec. 26, 1893
511,401	Bullie, C.	Meters	Dec. 26, 1893
511,407	Carpenter, C. E.	Rheostats	Dec. 26, 1893
511,419	Geisc, H.	Railways, systems, overhead	Dec. 26, 1893
511,434	Johnson, H. T.	Batteries, galvanic	Dec. 26, 1893
511,448	McCornish, J. G.	Electric locomotives	Dec. 26, 1893
511,451	Oehring, A. J.	Bells	Dec. 26, 1893
511,456	Rabidge, P.	Telephones, electric	Dec. 26, 1893
511,459	Roberts, I. L.	Lights, filaments and carbons	Dec. 26, 1893
511,461	Rudd, C. H.	Lighting, systems	Dec. 26, 1893
511,462	Rudd, C. H.	Telegraphy, fire, automatic	Dec. 26, 1893
511,464	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Dec. 26, 1893
511,495	Belfield, R.	Lights, arc, gravity feed, gear-clutch	Dec. 26, 1893
511,503	Bruger, T.	Galvanometers	Dec. 26, 1893
511,514	Curtis, F. G.	Batteries, galvanic	Dec. 26, 1893
511,523	Haskins, C. D.	Regulators	Dec. 26, 1893
511,524	Hesse, G. E.	Railways, systems, converters	Dec. 26, 1893
511,547	Randall, F. S.	Conductors	Dec. 26, 1893
511,559	Tesla, N.	Transmission of power	Dec. 26, 1893
511,560	Tesla, N.	do	Dec. 26, 1893
511,570	White, H. P.	Motors	Dec. 26, 1893
511,589	Colvin, F. R.	Telephones, systems	Dec. 26, 1893
511,599	Eglin, W.	Telegraphy, fire	Dec. 26, 1893
511,611	Hammond, C. N.	Insulators	Dec. 26, 1893
511,612	Hammond, C. N.	do	Dec. 26, 1893
511,613	Hammond, C. N.	Lighting, ceiling block	Dec. 26, 1893
511,627	Knitner, C. J.	Railways, closed conduit	Dec. 26, 1893
511,634	Mauldin, J. L.	Railways, systems, overhead	Dec. 26, 1893
511,682	Chalandre, A. J. O.	Electrolysis, aqueous bath, chemicals	Dec. 26, 1893
511,720	Angell and Porter	Lights, incandescent, special features	Dec. 26, 1893
511,731	Doolittle, T. B.	Annunciators, drop	Dec. 26, 1893
511,739	McNalley, J. J.	Telephones, calls, step-by-step	Dec. 26, 1893
511,742	Wotton and Bostrom	Inductariums, induction coils	Dec. 26, 1893
511,758	Crowders, W. A.	Motors	Jan. 2, 1894
511,763	Dunker, W. F.	Railways, systems, overhead, trolleys	Jan. 2, 1894
511,787	Moss, H. E.	Telegraphy, keys	Jan. 2, 1894
511,791	Perry and Hollaud	Galvanometers	Jan. 2, 1894
511,821	Trumpy, J.	Batteries, secondary	Jan. 2, 1894
511,822	Trumpy, J.	do	Jan. 2, 1894
511,824	Veeder, C. H.	Railways, systems, overhead, trolleys	Jan. 2, 1894
511,853	Lec, C. T.	Railways, conductor supports and insulators	Jan. 2, 1894
511,862	Roberts, C. H.	Railways, systems, telpher	Jan. 2, 1894
511,866	Slaugerup, A. F.	Alarms	Jan. 2, 1894
511,873	Callender, R.	Cut-outs, electro-magnetic	Jan. 2, 1894
511,874	Callender, R.	Telephones, automatic	Jan. 2, 1894
511,875	Callender, R.	do	Jan. 2, 1894
511,882	Drew, S. C.	Telephones, electric	Jan. 2, 1894
511,883	Dupern, A. R.	Telephones, details	Jan. 2, 1894
511,889	Hinds, J. L.	Cut-outs, mechanical	Jan. 2, 1894
511,915	Tesla, N.	Transmission of power	Jan. 2, 1894
511,916	Tesla, N.	Magneto-electric	Jan. 2, 1894
511,928	Brockbank, H. M.	Railways, conductor supports and insulators	Jan. 2, 1894
511,941	Gay and Parsons	Railways, systems, overhead, trolleys	Jan. 2, 1894
511,946	Gregory, F. L.	Clocks, electric	Jan. 2, 1894
511,953	Hunking, C. D.	Telegraphy, circuit closers	Jan. 2, 1894
511,988	Bentley, E. M.	Electric locomotives	Jan. 2, 1894
512,050	McBrien, F.	Railway signals, sectional rail	Jan. 2, 1894
512,051	McBrien, F.	do	Jan. 2, 1894
512,055	Pearsons, J. J.	Batteries, galvanic	Jan. 2, 1894
512,077	Wayland, J.	Railway signals, sectional rail	Jan. 2, 1894
512,115	Jones, A. B.	Regulators	Jan. 2, 1894
512,201	Mackenzie, G. W.	Railways, systems, overhead	Jan. 2, 1894
512,214	Pickernell, F. A.	Telegraphy, circuits and systems	Jan. 2, 1894
512,217	Randall, P. M.	Annunciators, time	Jan. 2, 1894
512,227	Scribner, C. E.	Regulators	Jan. 2, 1894
512,250	Hoyt, A. H.	Galvanometers	Jan. 2, 1894
512,253	Lockwood, W. C.	Batteries, secondary	Jan. 2, 1894
11,897	Sauche, H.	Connectors	Jan. 2, 1894

(Reis.)



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11,398	Sauche, H. (Reis.)	Connectors	Jan. 2, 1894
512,320	Peil and McFadden	Lights, incandescent	Jan. 9, 1894
512,327	Rogers and Fracker	Railways, systems, battery	Jan. 9, 1894
512,331	Seymour, A. P.	Cut-outs, thermal	Jan. 9, 1894
512,340	Tesla, N.	Electro-magnets	Jan. 9, 1894
512,373	Hanford, M.	Lighting, systems	Jan. 9, 1894
512,386	McBerty, F. R.	Electro-magnets	Jan. 9, 1894
512,397	Scribner, C. E.	Regulators	Jan. 9, 1894
512,398	Scribner, C. E.	Telephones, systems	Jan. 9, 1894
512,399	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Jan. 9, 1894
512,400	Scribner, C. E.	Telegraphy, fire	Jan. 9, 1894
512,401	Scribner, C. E.	Lights, arc, gravity feed, clutch	Jan. 9, 1894
512,422	Wirshing, E. A.	Telegraphy, printing, multiple wheel	Jan. 9, 1894
512,424	Wood, J. J.	Magneto-electric	Jan. 9, 1894
512,425	Wood, J. J.	do	Jan. 9, 1894
512,444	Kintner, C. J.	Railways, systems, closed conduit	Jan. 9, 1894
512,448	Pfarr, T. L.	Lights, sockets and keys	Jan. 9, 1894
512,464	Carey, A. C.	Batteries, secondary	Jan. 9, 1894
512,473	Irving, F. K.	Lights, arc, non-feeding	Jan. 9, 1894
512,481	Niewerth, R.	do	Jan. 9, 1894
512,482	Niewerth, R.	do	Jan. 9, 1894
512,514	Morrison, W.	Batteries, secondary	Jan. 9, 1894
512,535	Boynton, E. M.	Railways, systems, overhead, trolleys	Jan. 9, 1894
512,567	Stine, W. M.	Batteries, secondary	Jan. 9, 1894
512,602	Coffin, C. L.	Furnaces	Jan. 9, 1894
512,603	Coffin, C. L.	Inductoriums, transformers, stationary	Jan. 9, 1894
512,604	Coffin, C. L.	Metal working	Jan. 9, 1894
512,612	Hanahan, H. W.	Magneto-electric	Jan. 9, 1894
512,614	Hinds, J. L.	Cut-outs, mechanical, oscillating springs	Jan. 9, 1894
512,637	Turnbull, J. W.	Lights, incandescent	Jan. 9, 1894
512,656	Locke, F. M.	Telegraphy, relays and sounders	Jan. 9, 1894
512,667	Scribner, C. E.	Lights, arc, gravity feed, clutch	Jan. 9, 1894
512,672	Egan, S. E.	Telegraphy, circuit closers, thermal	Jan. 9, 1894
512,711	Keithly, H. K.	Connectors	Jan. 16, 1894
512,754	Selden, C.	Railway signals, sectional rail	Jan. 16, 1894
512,757	Silvov, W. L.	Batteries, galvanic	Jan. 16, 1894
512,774	Warner, E. P.	Cut-outs, mechanical	Jan. 16, 1894
512,797	Bowen, W. J.	Heaters, stoves and furnaces	Jan. 16, 1894
512,805	Childs, W. A.	Telephones, switch-board	Jan. 16, 1894
512,820	Henry, J. C.	Inductoriums, rotary	Jan. 16, 1894
512,823	Hough, A.	Batteries, secondary	Jan. 16, 1894
512,843	Rodges, H. S.	Magneto-electric	Jan. 16, 1894
512,853	Wilkes, G.	do	Jan. 16, 1894
512,872	Edison, T. A.	Telegraphy, duplex	Jan. 16, 1894
512,880	Hartley, C. J.	Lights, arc, gravity feed, clutch	Jan. 16, 1894
512,888	Luscomb, H. H.	Railways, conductor supports and insulators	Jan. 16, 1894
512,907	Rowley, S. B.	Railways, systems	Jan. 16, 1894
512,923	Benthuysen, W. V.	Railways, systems, overhead, trolleys	Jan. 16, 1894
512,970	Johanson, J. B.	Electrolysis, aqueous bath	Jan. 16, 1894
513,006	Dobrowolsky, M. Von Dolivo	Lighting, systems	Jan. 16, 1894
513,023	Mackenzie, G. W.	Railways, systems, overhead, trolleys	Jan. 16, 1894
513,052	Ongley, C. E.	Lights, arc, special features	Jan. 16, 1894
513,062	Sperry and Mills	Regulators	Jan. 16, 1894
513,065	White, H. P.	do	Jan. 16, 1894
513,109	Hough and Burns	Heaters	Jan. 23, 1894
513,112	Jandus, W.	Lights, arc, gravity feed, clutch	Jan. 23, 1894
513,112	Kelly, W. J.	Lights, incandescent, special features	Jan. 23, 1894
513,113	Kelly, W. J.	do	Jan. 23, 1894
513,126	Meredith, W.	Rheostats	Jan. 23, 1894
513,134	Otis, N. P.	Elevators	Jan. 23, 1894
513,181	Gröper, A.	Telephones, multiple electrode	Jan. 23, 1894
513,219	Turnbull, C., jr.	Bells	Jan. 23, 1894
513,220	Turnbull, C., jr.	do	Jan. 23, 1894
513,245	Paget and Paget	Batteries, secondary	Jan. 23, 1894
513,250	Stewart, J. B.	Cut-outs, electro-magnetic	Jan. 23, 1894
513,262	Gerry, J. H.	Time alarms	Jan. 23, 1894
512,264	Henry, J. C.	Meters	Jan. 23, 1894
513,300	Brown, W. L.	Igniting devices, manual	Jan. 23, 1894
513,305	Colvin, F. R.	Telephones, electric	Jan. 23, 1894
513,345	Strouse, L.	Annunciators, drop	Jan. 23, 1894
513,347	Taylor, H. H.	Magneto-electric	Jan. 23, 1894
513,349	Thomson and Rice	Transmission of power	Jan. 23, 1894
513,350	Van Emon, B. C.	Regulators	Jan. 23, 1894
513,352	Vogt, A. L.	Annunciators, drop systems	Jan. 23, 1894
513,364	Kahn, L.	Recorders	Jan. 23, 1894
513,370	Steinmetz, C. P.	Transmission of power	Jan. 23, 1894

No.	NAME.	CLASS.	DATE.
513,387	Fuller, W. C.	Medical and surgical, body-wear	Jan. 23, 1894
513,391	Gudgell, C.	Meters	Jan. 23, 1894
513,401	Lamm, B. G.	Electric locomotives	Jan. 23, 1894
513,420	Rowland, H. A.	Inductoriums, transformers, stationary	Jan. 23, 1894
513,421	Rowland, H. A.	do	Jan. 23, 1894
513,422	Rowland, H. A.	do	Jan. 23, 1894
513,425	Scott, C. F.	Systems of distribution	Jan. 23, 1894
513,426	Short, S. H.	Railways, conductor supports and insulators	Jan. 23, 1894
512,440	Pruyn, H. S.	Railways, systems, closed conduit	Jan. 23, 1894
513,457	Davis, H. P.	Rheostats	Jan. 23, 1894
513,459	Dieckmann, G. F.	Magneto-electric	Jan. 23, 1894
513,460	Fee, H. L.	do	Jan. 23, 1894
513,469	Sachs, J.	Railways, systems	Jan. 23, 1894
513,482	Chick, H. F.	Conductors, anti-inductive	Jan. 30, 1894
513,498	Frishen and Pfeil	Track instruments	Jan. 30, 1894
513,526	O'Sullivan, M. J.	Telegraphy, fire	Jan. 30, 1894
513,537	Scribner, C. E.	Telephones, systems, multiple switch-board, divided central.	Jan. 30, 1894
513,545	Ward, B. B.	Alarms	Jan. 30, 1894
513,564	Fuller, A. W.	Insulators	Jan. 30, 1894
513,566	Gale, E.	Railways, systems, overhead, trolleys	Jan. 30, 1894
513,587	Meissner, W. O.	Bells	Jan. 30, 1894
513,592	McEvoy, J. H.	Annunciators, drop	Jan. 30, 1894
513,593	McEvoy, J. H.	Bells	Jan. 30, 1894
513,612	Alteneck, F. von Hefner	Telegraphy, perforating	Jan. 30, 1894
513,626	Sturgeon, C. J.	Regulators	Jan. 30, 1894
513,630	Beard, C.	Conductors	Jan. 30, 1894
513,720	Page, H. S.	Telephones, electric	Jan. 30, 1894
513,729	Richards, F. H.	Telephones, multiple, electrode	Jan. 30, 1894
513,730	Richards, F. H.	Telephones, electric	Jan. 30, 1894
513,745	Weller, F. A.	Motors	Jan. 30, 1894
513,775	Garl, M.	Annunciators, drop	Jan. 30, 1894
513,777	Green, A.	Connectors	Jan. 30, 1894
513,796	Lewers, H.	Telegraphy, circuit closers	Jan. 30, 1894
513,829	Schurlman, D. S.	Telegraphy, circuit closers, thermal	Jan. 30, 1894
513,839	Talmadge, C. H.	Lighting, systems, automatic regulation	Jan. 30, 1894
513,846	Valley, G.	Railways, systems, overhead	Jan. 30, 1894
513,847	Valley, G.	do	Jan. 30, 1894
513,859	Anderson, C. G.	Electric locomotives	Jan. 30, 1894
513,894	Demmick, G. W.	Railways, systems, closed conduit	Jan. 30, 1894
513,895	Dewey, M. W.	Electric locomotives	Jan. 30, 1894
513,910	Fraley, G. B.	Batteries, secondary	Jan. 30, 1894
513,921	Gutierrez and Thompson	Lights, arc, non-feeding	Jan. 30, 1894
513,950	McCarthy, L.	Railways, conductor supports and insulators	Jan. 30, 1894
513,951	McFarlane, and Edgar	Lights, sockets and keys	Jan. 30, 1894
513,956	Ross, F. W.	Annunciators, drop	Jan. 30, 1894
513,960	Wheat, A. C.	Telephones, switches	Jan. 30, 1894
11,400	Stanley and Kelly	(Reis.) Systems of distribution	Jan. 30, 1894
513,975	Ayrton and Mather	Galvanometers	Feb. 6, 1894
513,982	Chick, H. F.	Conductors	Feb. 6, 1894
514,018	McEvoy, E. J.	Lighting, ceiling block	Feb. 6, 1894
514,019	McEvoy, E. J.	Alarms, burglar	Feb. 6, 1894
514,030	Prethard, F. E.	Regulators	Feb. 6, 1894
514,047	Waddell, M.	Magneto-electric	Feb. 6, 1894
514,056	Beadsley, R. C.	Railways, systems, closed conduit	Feb. 6, 1894
514,057	Bergmann, S.	Lights, arc, special features	Feb. 6, 1894
514,058	Bergmann, S.	do	Feb. 6, 1894
514,075	Hitt, S. E.	Galvanometers	Feb. 6, 1894
514,077	Thelder, J. D.	Regulators	Feb. 6, 1894
514,078	Thelder, J. D.	do	Feb. 6, 1894
514,109	Winkler, C. F.	Electric locomotives	Feb. 6, 1894
514,112	Ashley, F. M.	Railways, systems, closed conduit	Feb. 6, 1894
514,113	Ashley, F. M.	do	Feb. 6, 1894
514,114	Ashley, F. M.	do	Feb. 6, 1894
514,115	Bayer, F.	Batteries, galvanic	Feb. 6, 1894
514,120	Enholm, O. A.	Railways, systems, closed conduit	Feb. 6, 1894
514,128	Noyes and Winterhalden	Telegraphy, fire, variable signal, dial	Feb. 6, 1894
514,131	Raab, C.	Meters	Feb. 6, 1894
514,133	Seymour, H. A.	Railways, systems, closed conduit	Feb. 6, 1894
514,134	Seymour, H. A.	do	Feb. 6, 1894
514,135	Seymour, H. A.	Electric locomotives	Feb. 6, 1894
514,139	Wagner, G. G.	Lights, arc, positive feed, gear-clutch	Feb. 6, 1894
514,140	Wood, J. J.	Magneto-electric	Feb. 6, 1894
514,150	Kester, J. F.	do	Feb. 6, 1894
514,167	Tesla, N.	Conductors	Feb. 6, 1894
514,168	Tesla, N.	Systems of distribution	Feb. 6, 1894
514,170	Tesla, N.	Lights, incandescent	Feb. 6, 1894



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514,202	Sauer and Heutyschel	Alarms, burglar	Feb. 6, 1894
514,212	Connolly, J. N.	Bells	Feb. 6, 1894
514,221	Gray, L. B.	Railways, conductor supports and insulators	Feb. 6, 1894
514,228	Hunter, R. M.	Systems of distribution	Feb. 6, 1894
514,229	Hunter, R. M.	Lights, arc, positive feed, gear-clutch	Feb. 6, 1894
514,241	Potter, A. J.	Magneto-electric	Feb. 6, 1894
514,258	Bristol and Bristol	Galvanometers	Feb. 6, 1894
514,260	Carpenter, H. H.	Batteries, secondary	Feb. 6, 1894
514,267	Legay and Legay	do	Feb. 6, 1894
514,274	Bruyn, H. S.	Railways, systems, overhead	Feb. 6, 1894
514,275	Randolph, L. S.	Electrolysis, aqueous bath	Feb. 6, 1894
514,279	Sachs, J.	Telegraphy, fire	Feb. 6, 1894
514,460	Haywood, D. B.	Conductors	Feb. 13, 1894
514,461	Hey, G. W.	Telephones, calls, step-by-step	Feb. 13, 1894
514,462	Hey, G. W.	do	Feb. 13, 1894
514,480	Lemp, H.	Cut-outs, thermal	Feb. 13, 1894
514,501	Scattergood, C. F.	Annunciators	Feb. 13, 1894
514,504	Scribner, C. E.	Regulators	Feb. 13, 1894
514,505	Scribner and Warner	Lights, arc, gravity feed, clutch	Feb. 13, 1894
514,506	Scribner, C. E.	do	Feb. 13, 1894
514,524	Waite, H. F.	Friction generators	Feb. 13, 1894
514,554	Jones, C. E.	Cut-outs, thermal	Feb. 13, 1894
514,561	Leffler, P. W.	Railways, systems	Feb. 13, 1894
514,566	O'Sullivan, M. J.	Railway signals, sectional rail	Feb. 13, 1894
514,580	Willyoung, E. G.	Lighting, systems	Feb. 13, 1894
514,581	Willyoung, E. G.	Galvanometers	Feb. 13, 1894
514,582	Willyoung and Garver	do	Feb. 13, 1894
514,583	Woolverton, J. E.	Lights, arc, positive feed	Feb. 13, 1894
514,584	Ahlers, R.	Alarms, burglar	Feb. 13, 1894
514,586	Bradley, C. S.	Transmission of power	Feb. 13, 1894
514,593	Garver and Willyoung	Galvanometers	Feb. 13, 1894
514,641	Campiche, H.	Clocks, electric	Feb. 13, 1894
514,651	Graydon, A. J.	Igniting devices, manual	Feb. 13, 1894
514,656	Rickey, I. E.	Annunciators, drop systems	Feb. 13, 1894
514,695	Bloomer, C. T.	Telephones, electric	Feb. 13, 1894
514,697	Bradt, W. H.	Alarms	Feb. 13, 1894
514,714	Hoffmann and Brogan	Connectors	Feb. 13, 1894
514,718	Leffler, P. W.	Railways, systems	Feb. 13, 1894
514,739	Timbrell and Fyfe	Lights, incandescent	Feb. 13, 1894
514,775	Sanders, S. T.	Alarms	Feb. 13, 1894
514,801	Williams, J. A.	Railways, systems, overhead, trolleys	Feb. 13, 1894
514,817	Dufanet, O.	Magneto-electric	Feb. 13, 1894
514,822	Gennert, E. F.	Lights, incandescent, special features	Feb. 13, 1894
514,823	Gillette, W.	Telephones, systems	Feb. 13, 1894
514,827	Hampton, R. I.	Railways, systems, conduit	Feb. 13, 1894
514,845	Burns, P. C.	Batteries, galvanic	Feb. 13, 1894
514,849	Guillaume, T.	Conductors	Feb. 13, 1894
514,878	Barker, H. C.	Indicators	Feb. 13, 1894
514,902	Bradley, C. S.	Motors, alternating	Feb. 20, 1894
514,903	Bradley, C. S.	do	Feb. 20, 1894
514,904	Bradley, C. S.	do	Feb. 20, 1894
514,907	Brush, C. F.	Magneto-electric	Feb. 20, 1894
514,913	Cook, V. A.	Telephones, details	Feb. 20, 1894
514,916	Drawbaugh, D.	Telephones, electric	Feb. 20, 1894
514,920	Fitzsimmons, P.	Telephones, multiple, electrodes	Feb. 20, 1894
514,925	Gnillaume, T.	Conductors	Feb. 20, 1894
514,932	Hunter, R. M.	Railways, conductor supports and insulators	Feb. 20, 1894
514,933	Hunting, F. S.	Transmission of power	Feb. 20, 1894
514,960	Orpen, W. H., jr.	Bells	Feb. 20, 1894
514,972	Tesla, N.	Railways, systems	Feb. 20, 1894
514,973	Tesla, N.	Meters	Feb. 20, 1894
514,975	Watson, N. M.	Annunciators, drop systems	Feb. 20, 1894
514,979	Wilson, D. H.	Batteries, galvanic	Feb. 20, 1894
514,980	Wilson, D. H.	Telephones, systems	Feb. 20, 1894
514,981	Wilson, D. H.	Inductoriums, induction coils	Feb. 20, 1894
515,020	Ricker, A. L.	Inductoriums, transformers, stationary	Feb. 20, 1894
515,022	Rushmore, S. W.	Lights, arc, positive feed, gear-clutch	Feb. 20, 1894
515,037	Kleinsteuben and Kleinsteuben	Conductors, underground	Feb. 20, 1894
515,108	Callender, R.	Telephones, systems, automatic	Feb. 20, 1894
515,109	Callender, R.	Cut-outs, electro-magnets	Feb. 20, 1894
515,110	Callender, R.	Telegraphy, fire, variable signal, dial	Feb. 20, 1894
515,125	Meissner, W. O.	Lights, arc, positive feed, clutch	Feb. 20, 1894
515,145	Cyepull, J. J.	Railway signals, cab, sectional rail	Feb. 20, 1894
515,205	Ford, B.	Lights, arc, gravity feed, clutch	Feb. 20, 1894
515,241	Lyon, J. B.	Rheostats	Feb. 20, 1894
515,254	Shaw, A. J.	do	Feb. 20, 1894
515,255	Shaw, A. J.	Elevators	Feb. 20, 1894

No.	NAME.	CLASS.	DATE.
515,256	Shaw, A. J	Elevators	Feb. 20, 1894
515,274	Beekman, H. C	Indicators	Feb. 20, 1894
515,280	Brown, G. A	Rheostats	Feb. 20, 1894
515,281	Brown, G. A	Elevators	Feb. 20, 1894
515,286	Dyer, F. L	Steering and propulsion	Feb. 20, 1894
515,304	Shaw, A. J	Rheostats	Feb. 20, 1894
515,342	Kirkgaard, G	Lights, arc, gravity feed	Feb. 27, 1894
500,366	Riley and Selden	Railway signals, block	Feb. 27, 1894
515,374	Sperry, E. A	Motors, hand-operating devices	Feb. 27, 1894
516,386	Wenström, J	Magneto-electric	Feb. 27, 1894
515,397	Dahlgreen, J. O	Igniting devices, manual	Feb. 27, 1894
515,401	Hatch, A. S	Heaters, electric	Feb. 27, 1894
515,432	Hubbell, C. J	Batteries, galvanic	Feb. 27, 1894
515,448	Shomberg, R	Insulators	Feb. 27, 1894
515,465	Cottrell, H	Lights, incandescent	Feb. 27, 1894
515,467	Fritsche, W	Magneto-electric	Feb. 27, 1894
515,473	Higham, D	Regulators	Feb. 27, 1894
515,478	Meyer, J	Connectors	Feb. 27, 1894
515,484	Stirn, L	Lights, incandescent, special features	Feb. 27, 1894
515,485	Stirn, L	Lights, sockets and keys	Feb. 27, 1894
515,488	Doriot, C	Motors	Feb. 27, 1894
515,502	Rowley, L. B	Batteries, secondary	Feb. 27, 1894
515,503	Sachs, J	Telegraphy, fire	Feb. 27, 1894
515,531	O'Connell, J. J	Telephones, systems, multiple switch-board, divided central.	Feb. 27, 1894
515,572	Cassidy and Butler	Railways, systems, closed conduit	Feb. 27, 1894
515,589	Kleinstauben and Kleinstauben	Alarms	Feb. 27, 1894
515,606	Nourse, R. C	Lights, sockets and keys	Feb. 27, 1894
515,613	Roberts, C. A	Magneto-electric	Feb. 27, 1894
515,638	Wilson, A. G	Railway signals, sectional rail	Feb. 27, 1894
515,648	Breese, C. P	do	Feb. 27, 1894
515,652	Coffin, C. L	Metal working	Feb. 27, 1894
515,654	Comstock, B. F	Railways, systems, overhead, trolleys	Feb. 27, 1894
515,665	English, J. W	Annunciators, drop	Feb. 27, 1894
515,693	Nutting, S. E	Heaters	Feb. 27, 1894
515,709	Houck and Browning	Telegraphy, transmitters	Feb. 27, 1894
515,716	Peeples, G	Lights, incandescent, special features	Feb. 27, 1894
515,751	Dalton and Dalton	Railway signals, block	Mar. 6, 1894
515,755	Dunn, G. S	Motors	Mar. 6, 1894
515,761	Gaynor, T. F	Telegraphy, fire	Mar. 6, 1894
515,762	Gaynor, T. F	Telegraphy, fire, variable signal	Mar. 6, 1894
515,763	Von Grabowski, C	Electrolysis, aqueous bath	Mar. 6, 1894
515,778	Lemp and Moody	Metal working	Mar. 6, 1894
515,779	Lipscomb, H. H	Railways, conductor supports and insulators	Mar. 6, 1894
515,797	Selden, C	Telephones, magnetic	Mar. 6, 1894
515,805	Watson, W. W	Time checks	Mar. 6, 1894
515,806	Wells, H. J	Lighting, systems	Mar. 6, 1894
515,822	Deweese, T. J	Conductors	Mar. 6, 1894
515,827	Hatch, C. A	Alarms	Mar. 6, 1894
515,845	Sloan, W. E	Telegraphy, repeaters	Mar. 6, 1894
515,850	Wood, J. J	Lights, arc, gravity feed, gear-clutch	Mar. 6, 1894
515,882	Maynadier, J. E	Magneto-electric	Mar. 6, 1894
515,885	Scott, C. F	Transmission of power	Mar. 6, 1894
515,900	Brown, C. E. L	Motors, alternating	Mar. 6, 1894
515,905	Deweese, T. J	Conductors	Mar. 6, 1894
515,907	Forbus, G	Railways, conductor supports and insulators	Mar. 6, 1894
515,939	Pope, E	Telephones, systems, multiple switch-board, test.	Mar. 6, 1894
515,940	Pope, E	do	Mar. 6, 1894
515,962	Kelly, J. F	Motors alternating	Mar. 6, 1894
515,965	Merritt, A. A	Knitting and netting, stopping	Mar. 6, 1894
515,969	Ries, E. E	Lights, sockets and keys	Mar. 6, 1894
515,970	Ries, E. E	Rheostats	Mar. 6, 1894
515,971	Ries, E. E	Lights, sockets and keys	Mar. 6, 1894
515,977	Stanley, Kelly and Chesney	Motors, alternating	Mar. 6, 1894
516,025	Schuremann, D. S	Bells	Mar. 6, 1894
516,038	Willard, T. A	Batteries, secondary, charging and discharging	Mar. 6, 1894
516,043	Barney, E	Telegraphy, circuit closers, thermal	Mar. 6, 1894
516,071	Applegard, A. E	Heaters	Mar. 6, 1894
516,095	Jenkins, S. D. B	do	Mar. 6, 1894
516,152	Cochrane, A	do	Mar. 6, 1894
516,161	Loe, T. C	Conductors, underground	Mar. 6, 1894
516,167	Rider and Lewis	Heaters	Mar. 6, 1894
516,170	Waddell and Entz	Magneto-electric	Mar. 6, 1894
516,188	Dewey, M. W	Railways, systems, converter	Mar. 13, 1894
516,198	Goodhue, C. F	Dampers, automatic, electric	Mar. 13, 1894
516,204	Ihlder, J. D	Regulators	Mar. 13, 1894



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516,212	Lewis, A. D	Printing, stencil-making pens	Mar. 13, 1894
516,213	Lundell, R	Motors, alternating	Mar. 13, 1894
516,217	McNulta, H	Rheostats	Mar. 13, 1894
516,239	Sturts, C. F. A	Alarms, burglar	Mar. 13, 1894
516,240	Sturts, C. F. A	do	Mar. 13, 1894
516,253	Whitney, E. R	Batteries, secondary	Mar. 13, 1894
516,263	Conklin, O. F	Motors	Mar. 13, 1894
516,298	Crouch, F. J	Magneto-electric	Mar. 13, 1894
516,312	Lemp and Moody	Metal working, electric	Mar. 13, 1894
516,336	Miner, W. M	Lighting, systems, car	Mar. 13, 1894
516,337	Pendleton, J. M	Metal molds, soft metal machines	Mar. 13, 1894
516,341	Ayrston and Matler	Galvanometers	Mar. 13, 1894
516,343	Blake and Lacey	Elevators	Mar. 13, 1894
516,374	King, F. L	Railways, systems, closed conduit	Mar. 13, 1894
516,379	Müller, H	Batteries, secondary	Mar. 13, 1894
516,433	Gentry, W. T	Coin-controlled apparatus	Mar. 13, 1894
516,447	Olivette, C	Magneto-electric	Mar. 13, 1894
516,478	Donnelly, J. R	Locks, electric	Mar. 13, 1894
516,484	Greengard, M. D	Lights, sockets and keys	Mar. 13, 1894
516,487	Haskins, C. D	Regulators	Mar. 13, 1894
516,492	Knapp, C	Railways, systems, overhead, trolleys	Mar. 13, 1894
516,495	Lewis, I. N	Lighting, systems, car	Mar. 13, 1894
516,496	Lewis, I. N	do	Mar. 13, 1894
516,497	Lewis, I. N	Regulators	Mar. 13, 1894
516,498	Lewis, I. N	Batteries, secondary	Mar. 13, 1894
516,500	Martin, M	Bells	Mar. 13, 1894
516,506	McConbray, T	Telephones, systems, house	Mar. 13, 1894
516,508	Omeara, J	Heaters	Mar. 13, 1894
516,516	Baxter, W., jr	Electric locomotives	Mar. 13, 1894
516,524	Denison, J. F	Motors	Mar. 13, 1894
516,552	Parker and Summers	Telegraphy, automatic	Mar. 13, 1894
516,553	Sayers, W. B	Magneto-electric	Mar. 13, 1894
516,558	Taylor, J. D	Railway signals, sectional rail	Mar. 13, 1894
516,565	Cummings, J. F	Railways, systems, closed conduit	Mar. 13, 1894
516,574	McGahan, F. L	Lights, arc, positive feed, gear-clutch	Mar. 13, 1894
516,596	Green, J. L	Railways, track instruments	Mar. 13, 1894
516,597	Green, J. L	Railway signals, block	Mar. 13, 1894
516,598	Green, J. L	Railways, track instruments	Mar. 13, 1894
516,626	Brown, E. H	Railways, systems, closed conduit	Mar. 13, 1894
516,631	Laurence, W	do	Mar. 13, 1894
23,112	Scattergood, C. F	(Design) Apparatus, electricity	Mar. 13, 1894
516,641	Burns, M. J	Telegraphy, fire, variable signal, dial	Mar. 20, 1894
516,642	Burns, M. J	Telephones, magnetic	Mar. 20, 1894
516,643	Burns, M. J	do	Mar. 20, 1894
516,651	Hochhausen, W	Regulators	Mar. 20, 1894
516,653	Lary, L. F	Batteries, galvanic	Mar. 20, 1894
516,666	Thom on, E	Railways, systems	Mar. 20, 1894
516,689	Swan, S. G. C	Lights, incandescent	Mar. 20, 1894
516,708	McCordy, C. A	Telegraphy, circuit closers, thermal	Mar. 20, 1894
516,713	Waite, H. F	Motors	Mar. 20, 1894
516,732	Francis, E. R	Magneto-electric	Mar. 20, 1894
516,740	King, G. R	Medical and surgical, body-wear	Mar. 20, 1894
516,771	Ritzmann, W	Alarms, burglar	Mar. 20, 1894
516,777	Stromberg and Carlson	Telephones, switches	Mar. 20, 1894
516,784	Wriest, P., jr	Motors	Mar. 20, 1894
516,792	Bassett, N. C	Magneto-electric	Mar. 20, 1894
516,794	Bell, L	do	Mar. 20, 1894
516,795	Bell, L	Motors, alternating	Mar. 20, 1894
516,796	Bell, L	do	Mar. 20, 1894
516,797	Bell, L	Magneto-electric	Mar. 20, 1894
516,800	Burnett and Doane	Lights, incandescent	Mar. 20, 1894
516,801	Demmick, G. W	Lamp and gas fittings, guards	Mar. 20, 1894
516,804	Fiske, J. P. B	Transmission of power	Mar. 20, 1894
516,805	Fiske, J. P. B	do	Mar. 20, 1894
516,806	Gibboney, J. W	Railway signals, sectional rail	Mar. 20, 1894
516,807	Henry, J. C	Magneto-electric	Mar. 20, 1894
516,808	Henry, J. C	Railways, systems, overhead	Mar. 20, 1894
516,818	Knight, W. H	Regulators	Mar. 20, 1894
516,819	Knowles, E. R	Lights, sockets and keys	Mar. 20, 1894
516,820	Knowles, E. R	do	Mar. 20, 1894
516,821	Knowles, E. R	Lamps and gas fittings, head lights	Mar. 20, 1894
516,822	Knowles, E. R	Lights, arc, gravity-feed, gear-clutch	Mar. 20, 1894
516,823	Knowles and Robinson	Galvanometers	Mar. 20, 1894
516,824	Knowles, E. R	Lights, incandescent, special features	Mar. 20, 1894
516,825	Knowles and Parks	Lights, arc, positive feed, gear-clutch	Mar. 20, 1894
516,826	Knowles, E. R	Lights, arc, special features	Mar. 20, 1894
516,827	Lieb, C. A	Magneto-electric	Mar. 20, 1894

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516,829	Moody, W. S	Inductoriums, transformers, stationary	Mar. 20, 1894
516,831	Moore, J. W	Motors, hand-operating devices	Mar. 20, 1894
516,834	Priest, E. D	do	Mar. 20, 1894
516,835	Rice, E. W., jr	Lighting, systems, automatic regulation	Mar. 20, 1894
516,836	Rice, E. W., jr	Systems of distribution	Mar. 20, 1894
516,837	Rice, E. W., jr	Magneto-electric	Mar. 20, 1894
516,839	Robinson, L. T	Galvanometers	Mar. 20, 1894
516,840	Robinson, C	Motors	Mar. 20, 1894
516,843	Spaulding, H. C	Elevators	Mar. 20, 1894
516,844	Swan, A	Lights, sockets and keys	Mar. 20, 1894
516,845	Thomson, E	Magneto-electric	Mar. 20, 1894
516,846	Thomson, E	Regulators, alternating	Mar. 20, 1894
516,847	Thomson, E	do	Mar. 20, 1894
516,848	Thomson, E	Magneto-electric	Mar. 20, 1894
516,849	Thomson, E	Motors, alternating	Mar. 20, 1894
516,850	Thomson, E	Inductoriums, transformers, stationary	Mar. 20, 1894
516,853	Turner, O. N	Magneto-electric	Mar. 20, 1894
516,855	Willyoung, E. G	Galvanometers	Mar. 20, 1894
516,862	Frost, E. F	Telephones, systems, multiple switch-board	Mar. 20, 1894
516,876	Petersen, H. A. F	Railways, systems, closed conduit	Mar. 20, 1894
516,878	Sachs, J	Igniting devices, manual	Mar. 20, 1894
516,892	Langhans, R	Lights, incandescent	Mar. 20, 1894
516,903	Taylor, J. D	Railway signals, sectional rail	Mar. 20, 1894
516,916	Coleman, C. J	Electric locomotives	Mar. 20, 1894
516,917	Coleman, C. J	Motors	Mar. 20, 1894
516,956	Watson, R	Elevators	Mar. 20, 1894
516,982	White, A. C	Telephones, details	Mar. 20, 1894
517,009	McLean, A	Lights, incandescent, special features	Mar. 20, 1894
23,140	Weston, E	(Reis) Measuring instruments	Mar. 20, 1894
517,017	Ashwell and Tuttle	Lights, incandescent	Mar. 27, 1894
517,018	Ballard, G. L	Batteries, secondary	Mar. 27, 1894
517,028	Church, F. S	Railways, systems, overhead, trolleys	Mar. 27, 1894
517,042	Heimann, S	Lights, filaments and carbons	Mar. 27, 1894
517,069	Rockwell, F. C	Lights, incandescent	Mar. 27, 1894
517,100	Gibbs, J. S	Cut-outs, mechanical, rotary	Mar. 27, 1894
517,105	Henderson, J. W	Motors	Mar. 27, 1894
517,120	Lemp and Wightman	Cut-outs, thermal	Mar. 27, 1894
517,134	Worthen, W. E	Railways, systems, batteries	Mar. 27, 1894
517,162	Hunter, R. M	Galvanometers	Mar. 27, 1894
517,163	Hunter, R. M	do	Mar. 27, 1894
517,166	Mowry, L. G	Railways, systems, overhead, trolleys	Mar. 27, 1894
517,169	Roberts, J. K	Elevators	Mar. 27, 1894
517,170	Rowley, L. B	Heaters	Mar. 27, 1894
517,199	Stannard, J. E	Steam valves, electric throttles	Mar. 27, 1894
517,243	Sabin and Hampton	Telephones, systems	Mar. 27, 1894
517,253	Willyoung, E. G	Galvanometers	Mar. 27, 1894
517,263	Colvin, F. R	Telephones, switches	Mar. 27, 1894
517,299	Rice and Williams	Telephones, calls, reed	Mar. 27, 1894
517,401	Allen, C. E	Telegraphy, circuit closers	Mar. 27, 1894
517,402	Allen, C. E	do	Mar. 27, 1894
517,419	Leonard, M. B	Railway signals	Mar. 27, 1894
11,408	Herdman, F. E	(Reis.) Elevators	Mar. 27, 1894
11,409	Herdman, F. E	(Reis.) Elevators, safety device	Mar. 27, 1894
517,432	Cary, A. C	Lights, incandescent	Apr. 3, 1894
517,445	Dashiell, J. M	Coin-controlled apparatus	Apr. 3, 1894
517,450	Frame and Morden	Bells	Apr. 3, 1894
517,455	Henry, G. B	Batteries, secondary	Apr. 3, 1894
517,480	Prentiss, H. S	Clocks, electric	Apr. 3, 1894
517,498	Swarty, G. W	Lighting, systems, car	Apr. 3, 1894
517,502	Weaver, J	Telegraphy, circuit closers, thermal	Apr. 3, 1894
517,520	Graham and Chapmann	Igniting devices, manual	Apr. 3, 1894
517,531	Roehl, C. E	Railways, systems, converters	Apr. 3, 1894
517,547	Gordon, M. T	Alarms, burglar	Apr. 3, 1894
517,549	Keithly, W. C	Railways, systems, conduit	Apr. 3, 1894
517,564	Deckert, W	Telephones, electric	Apr. 3, 1894
517,582	Mackie, R	Motors, hand-operating devices	Apr. 3, 1894
517,591	Robinson, M	Insulators	Apr. 3, 1894
517,621	McCarthy, L	Railways, conductor supports and insulators	Apr. 3, 1894
517,634	Winslow, G. H	Insulators	Apr. 3, 1894
517,664	Reubel, E	Cut-outs, mechanical, oscillating springs	Apr. 3, 1894
517,668	Still, W. J	Motors	Apr. 3, 1894
517,669	Still, W. J	do	Apr. 3, 1894
517,692	Goreham, H. A	Railways, systems, conduit	Apr. 3, 1894
517,714	Winter, J. F	Regulators	Apr. 3, 1894
517,743	Gaver, W. S	Railways, systems	Apr. 3, 1894
517,762	McKelvey, S. D	Telephones, supports	Apr. 3, 1894
517,763	McKelvey, S. D	Telephones, magnetic	Apr. 3, 1894



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517,764	McKelvey, S. D.	Telephones, magnetic	Apr. 3, 1894
517,770	Shaw, A. J.	Rheostats	Apr. 3, 1894
517,773	Speed, Barker and Frank	Cut-outs, mechanical, oscillating snap	Apr. 3, 1894
517,804	Jenkins, W. F.	Railways, systems, conduit	Apr. 3, 1894
517,831	Arnold, B. J.	Magneto-electric	Apr. 10, 1894
517,858	Greenfield, E. T.	Motors	Apr. 10, 1894
517,862	Isaacs, J. A.	Medical and surgical, bath	Apr. 10, 1894
517,866	Keith, N. S.	Regulators	Apr. 10, 1894
517,886	Pruvn, H. S.	Railways, systems, closed conduit	Apr. 10, 1894
517,940	Tisdale, C. D.	do	Apr. 10, 1894
517,948	Emery, C. E.	Electric locomotives	Apr. 10, 1894
517,957	MacCoy, A. T.	Cut-outs, mechanical, sliding	Apr. 10, 1894
517,997	Biddle and Kennedy	Electric locomotives	Apr. 10, 1894
517,998	Biddle and Kennedy	Lighting, systems, car	Apr. 10, 1894
518,006	Lawrence, W.	Electric locomotives	Apr. 10, 1894
518,015	Thompson, R. W.	Railways, systems, overhead, trolleys	Apr. 10, 1894
518,033	Henry, J. C.	Motors	Apr. 10, 1894
518,037	Hunter, R. M.	Annunciators, step-by-step	Apr. 10, 1894
518,062	Gale, H. B.	Regulators	Apr. 10, 1894
518,071	McCarthy, L.	Railways, conductor supports and insulators	Apr. 10, 1894
518,092	Collier, A. T.	Electro-magnets	Apr. 10, 1894
518,133	Blake, J. F.	Alarms	Apr. 10, 1894
518,142	Goodman and Goodman	Telephones, electric	Apr. 10, 1894
518,179	Criggal, J. E.	Lights, incandescent	Apr. 10, 1894
518,188	Hersh, Woodward and Pettee	Cut-outs, mechanical, rotary	Apr. 10, 1894
518,190	Keller, A. K.	Phonographs, coin-controlled apparatus	Apr. 10, 1894
518,191	Keller, A. K.	do	Apr. 10, 1894
518,192	Keller, A. K.	do	Apr. 10, 1894
518,198	McCanny and Root	Lights, incandescent, special features	Apr. 10, 1894
518,209	Gilliland and Toppan	Phonographs, coin-controlled apparatus	Apr. 10, 1894
518,213	Ball, H. P.	Railways, conductor supports and insulators	Apr. 17, 1894
518,214	Ball, H. P.	do	Apr. 17, 1894
518,217	Bell, L.	Regulators, alternating	Apr. 17, 1894
518,218	Bell, L.	Motors, hand-operating devices	Apr. 17, 1894
518,221	Brown, H. P.	Electric locomotives	Apr. 17, 1894
518,231	Ekstrom, A.	Cut-outs, mechanical	Apr. 17, 1894
518,232	Elkins, W. H.	Regulators	Apr. 17, 1894
518,236	Fiske, J. P. B.	Rheostats	Apr. 17, 1894
518,244	Haskins, C. D.	Meters	Apr. 17, 1894
518,245	Holden, F.	Galvanometers	Apr. 17, 1894
518,254	Knight, W. H.	Motors, hand-operating devices	Apr. 17, 1894
518,263	Milde, C.	Telephones, granular	Apr. 17, 1894
518,265	Mix, E. W.	Meters	Apr. 17, 1894
518,290	Thomson, E.	Magneto-electric	Apr. 17, 1894
518,291	Thomson, E.	Motors	Apr. 17, 1894
518,293	Tisdale, C. D.	Electric locomotives	Apr. 17, 1894
518,301	Wirt, H. C.	Insulators	Apr. 17, 1894
518,310	Duncan, T.	Motors, alternating	Apr. 17, 1894
518,311	Duncan, T.	Meters	Apr. 17, 1894
518,312	Egger and Wessel	Magneto-electric	Apr. 17, 1894
518,331	Sabin and Hampton	Telephones, systems, multiple switch-board, test.	Apr. 17, 1894
518,332	Sabin and Hampton	Telephones, systems, multiple switch-board, divided central.	Apr. 17, 1894
518,333	Sabin and Hampton	do	Apr. 17, 1894
518,334	Sabin and Hampton	Telephones, systems	Apr. 17, 1894
518,337	Warner, C. D.	Clocks, electric	Apr. 17, 1894
518,345	Cooper, W.	Motors, hand-operating devices	Apr. 17, 1894
518,349	Müller, C. L. F.	Regulators	Apr. 17, 1894
518,357	Straus, T.	Railways, systems, overhead, trolleys	Apr. 17, 1894
518,359	Waterhouse, A. G.	Systems of distribution	Apr. 17, 1894
518,360	Waterhouse, A. G.	Regulators	Apr. 17, 1894
518,362	Ansley, J. D.	Railways, systems, overhead, trolleys	Apr. 17, 1894
518,365	Dinke, A. C.	Rheostats	Apr. 17, 1894
518,367	Jacques, W. W.	Telephones, systems	Apr. 17, 1894
518,373	McCarthy, L.	Railways, conductor supports and insulators	Apr. 17, 1894
518,392	Carty, J. J.	Telephones, systems	Apr. 17, 1894
518,404	Henshaw, F. V.	Motors	Apr. 17, 1894
518,414	Meyer, J.	Connectors	Apr. 17, 1894
518,444	Dickeman, H. E.	Magneto-electric	Apr. 17, 1894
518,471	Smith, J. B.	Lighting, systems	Apr. 17, 1894
518,483	Blake, J. F.	Alarms	Apr. 17, 1894
518,511	Rex, B. F.	Railway signals, cab, sectional rail	Apr. 17, 1894
518,525	Hermann, E. A.	Railway signals, block	Apr. 17, 1894
518,534	Olan, J. W. Th.	Meters	Apr. 17, 1894
518,540	Banholzer, P. P.	Railways, systems, conduit	Apr. 17, 1894
518,542	Cox, H. B.	Batteries, thermal	Apr. 17, 1894

No.	NAME.	CLASS.	DATE.
518,561	Brown, H. P.	Motors	Apr. 17, 1894
518,562	Brown, H. P.	Magneto-electric	Apr. 17, 1894
518,604	Hollerith, H.	Indicators	Apr. 24, 1894
518,613	Lecellier, L. R.	Telegraphy, circuit closers	Apr. 24, 1894
518,654	Segerdahl, R.	Lights, arc, gravity feed, clutch	Apr. 24, 1894
518,667	Elden, J.	Locks, electric	Apr. 24, 1894
518,673	Milligan, T. P.	Railways, systems	Apr. 24, 1894
518,693	Lange and Lamme	Motors, hand-operating devices	Apr. 24, 1894
518,695	Maynard, C. A.	Railways, systems, conduit	Apr. 24, 1894
518,710	Carmichael, H.	Electrolysis, aqueous bath, chemicals	Apr. 24, 1894
518,713	Connell, W. H.	Lights, incandescent, special features	Apr. 24, 1894
518,719	Hoffmann, C.	Lights, arc, gravity feed, gear-clutch	Apr. 24, 1894
518,722	Kirnan, W. H.	Telegraphy, fire, non-interfering	Apr. 24, 1894
518,731	Bauer, F. R.	Electrolysis, aqueous bath	Apr. 24, 1894
518,738	Kelly and Chesney	Motors, alternating	Apr. 24, 1894
518,739	Kelly, J. F.	do	Apr. 24, 1894
518,742	Lockwood, W. C.	Telephones, electric	Apr. 24, 1894
518,756	Hicks, T. H.	Magneto-electric	Apr. 24, 1894
518,768	Ricker, A. L.	do	Apr. 24, 1894
518,773	Balsley, W. H.	Telephones, systems	Apr. 24, 1894
518,782	Goodband, J. E.	Railways, systems, closed conduit	Apr. 24, 1894
518,786	Le Suren, E. A.	Electrolysis, aqueous bath apparatus	Apr. 24, 1894
518,788	Mehren, J. F.	Telegraphy, circuits and systems	Apr. 24, 1894
518,793	Scribner, C. E.	Lights, arc, gravity feed, clutch	Apr. 24, 1894
518,800	Woltmann, E.	Cut-outs, mechanical, oscillating snap	Apr. 24, 1894
518,813	Hill, W. S.	Cut-outs, mechanical	Apr. 24, 1894
518,877	Curwen, S. H.	Locks, electric	Apr. 24, 1894
518,885	Hollerith, H.	Indicators	Apr. 24, 1894
518,886	Hollerith, H.	do	Apr. 24, 1894
518,894	Peterson, O. E.	Medical and surgical, body-wear	Apr. 24, 1894
518,906	Whittingham, G. H.	Regulators	Apr. 24, 1894
518,907	Wyman, H. B.	Insulators	Apr. 24, 1894
518,913	Brown, G. W.	Magneto-electric	Apr. 24, 1894
518,916	Cottrell, H.	Telephones, multiple, electrode	Apr. 24, 1894
518,939	Conner, D. E.	Electric railways, systems, closed conduit	May 1, 1894
518,944	Forbes, G.	Magneto-electric	May 1, 1894
518,945	Forbes, G.	do	May 1, 1894
518,946	Forbes, G.	Inductariums, transformers, stationary	May 1, 1894
518,952	Hooper, G. W.	Railways, systems, overhead, trolleys	May 1, 1894
518,959	Kolbassieff, E. V.	Telephones, magnetic	May 1, 1894
518,966	Phillips and Entz	Batteries, secondary	May 1, 1894
518,971	Sommer, H. P.	Time alarms	May 1, 1894
519,043	Jenkins, S. B.	Heaters	May 1, 1894
519,045	McKeown, J. B.	Lights, arc, gravity feed, clutch	May 1, 1894
519,076	Thomson, E.	Inductariums, transformers, stationary	May 1, 1894
519,077	Trumpy, J.	Cut-outs, mechanical	May 1, 1894
519,097	Schmid, A.	Magneto-electric	May 1, 1894
519,098	Schmid and Lamme	Regulators, alternating	May 1, 1894
519,099	Smith, F. S.	Lights, incandescent	May 1, 1894
519,115	Henry, J. C.	Railways, systems, overhead	May 1, 1894
519,116	Herdman, F. E.	Motors, hand-operating devices	May 1, 1894
519,117	Herdman, F. E.	Elevators	May 1, 1894
519,120	Herdman, F. E.	Regulators	May 1, 1894
519,121	Herdman, F. E.	Motors, hand-operating devices	May 1, 1894
519,122	Herdman, F. E.	do	May 1, 1894
519,123	Herdman, F. E.	do	May 1, 1894
519,124	Herdman, F. E.	do	May 1, 1894
519,142	Verley, H. S. L.	Telegraphy, relays and sounders	May 1, 1894
519,171	Brooks, D.	Conductors, underground	May 1, 1894
519,188	Kersberg, R.	Magneto-electric	May 1, 1894
519,213	Werner and Werner	Telegraphy, fire, automatic	May 1, 1894
519,272	Ries and Scott	Motors, alternating	May 1, 1894
519,280	Baxter, W.	Magneto-electric	May 1, 1894
519,281	Baxter, W.	do	May 1, 1894
519,283	Fyfe, J. C.	Lights, arc, positive feed, gear-clutch	May 1, 1894
519,291	Purvis, W. B.	Railways, systems, closed conduit	May 1, 1894
519,328	Graham and Allen	Railways, systems, conduit	May 8, 1894
519,330	Hertel, C. W. A.	Batteries, galvanic	May 8, 1894
519,334	Lavens, E.	Lights, arc, special features	May 8, 1894
519,335	Lemp, H.	Regulators, alternating	May 8, 1894
519,338	McElroy, J. F.	Cut-outs, mechanical	May 8, 1894
519,346	Pupin, M. S.	Telegraphy, circuits and systems	May 8, 1894
519,347	Pupin, M. S.	do	May 8, 1894
519,376	Bradley, C. S.	Inductariums, transformers, stationary	May 8, 1894
519,377	Bradley, C. S.	Transmission of power	May 8, 1894
519,380	Cook, J. F.	Railways, systems, conduit	May 8, 1894
519,382	Engel, H.	Alarms	May 8, 1894



No.	NAME.	CLASS.	DATE.
519,400	Blumenberg, H., jr	Electrolysis, aqueous bath, chemicals	May 8, 1894
519,446	Crounse and Butledge	Railways, conductor supports and insulators	May 8, 1894
519,497	Dunish, A	Telegraphy, circuit closers, thermal	May 8, 1894
519,519	Allen, E. H	Railways, systems, overhead	May 8, 1894
519,602	Elieson, C. P	Batteries, secondary	May 8, 1894
519,634	Kloss, E	Telegraphy, circuit closers, thermal	May 8, 1894
519,662	Carpenter, C. F	Motors, reciprocating	May 8, 1894
519,674	Heilman, J. J	Electric locomotives	May 8, 1894
519,715	Keller, E. E	Motors, hand-operating devices	May 15, 1894
519,726	Mathiesen, W	Lights, arc, gravity feed, clutch	May 15, 1894
519,794	Mason, D	Railways, systems, closed conduit	May 15, 1894
519,837	Cruser, V. D	Railways, systems, overhead, trolleys	May 15, 1894
519,849	Spencer, T	Lighting, systems	May 15, 1894
519,858	Elkins, W. H	Regulators	May 15, 1894
519,862	Lamme, B. G	Motors, alternating	May 15, 1894
519,869	McKay, H. S	Motors, reciprocating	May 15, 1894
519,870	McKay, H. S	do	May 15, 1894
519,876	Scribner, C. E	Telephones, systems	May 15, 1894
519,881	Willard, T. A	Regulators	May 15, 1894
519,912	Kester, J. T	Lights, arc, gravity feed, clutch	May 15, 1894
519,932	Strong and Reed	Railway signals, cab, sectional rail	May 15, 1894
519,938	Beattie, F	do	May 15, 1894
519,945	Garey, W. E	Galvanometers	May 15, 1894
520,050	Hicks, T. H	Systems of distribution	May 22, 1894
520,061	Kinsman, F. E	Railway signals, cab, sectional rail	May 22, 1894
520,062	Kinsman, F. E	Railway signals, sectional rail	May 22, 1894
520,072	McKee, A. G	Motors, hand-operating devices	May 22, 1894
520,083	Sabin and Hampton	Telephones, systems, multiple switch-board, divided central.	May 22, 1894
520,086	Slocum, H. F	Telephones, electric	May 22, 1894
520,088	Smith, F. S	Lights, incandescent	May 22, 1894
520,106	Cox, H. B	Telephones, electric	May 22, 1894
520,108	Fletcher, W. C	Car brakes	May 22, 1894
520,111	Hunter, R. M	Electric locomotives	May 22, 1894
520,120	Northrup, E. F	Batteries, galvanic	May 22, 1894
520,127	Walter, H. E	Telegraphy, fire, variable signal, dial	May 22, 1894
520,128	Wood, J. J	Lighting, systems	May 22, 1894
420,129	Wood, J. J	Galvanometers	May 22, 1894
520,152	Welch, R. K	Magneto-electric	May 22, 1894
520,156	Brown, T. M	Railways, systems, overhead, trolleys	May 22, 1894
520,169	Ricker, A. L	Magneto-electric	May 22, 1894
520,206	Hinkley, C. S. W	Medical and surgical, electrodes	May 22, 1894
520,213	Tighe and Childs	Railways, conductor supports and insulators	May 22, 1894
520,223	Schneider, G. L	Lighting, systems	May 22, 1894
520,228	Eickemeyer, R	Electric locomotives	May 22, 1894
520,232	Higham, D	Lighting, systems, automatic regulation	May 22, 1894
520,234	Kirnan, W. H	Annunciators, step-by-step	May 22, 1894
520,246	Simoneau, L. E	Telephones, systems, automatic	May 22, 1894
520,263	Von Hefner, F	Lighting, systems	May 22, 1894
520,264	Hoffmann, C	Magneto-electric	May 22, 1894
520,267	Miller, W. H	Regulators	May 22, 1894
520,274	Von Siemens, E. W	Railways, systems, overhead	May 22, 1894
520,279	Werline, H. E	Cut-outs, mechanical	May 22, 1894
520,280	Whittingham, G. H	Regulators	May 22, 1894
520,299	Coffin, C. L	Metal working	May 22, 1894
520,300	Coffin, C. L	do	May 22, 1894
520,304	De Voe, W. R	Railways, systems, conduit	May 22, 1894
520,306	Goodman and Goodman	Telephones, electric	May 22, 1894
520,318	Knap, E. D	Lights, incandescent, special features	May 22, 1894
520,323	Lewis, W. F	Railway signals, block systems	May 22, 1894
520,329	Muir, R	Railways, systems, overhead	May 22, 1894
520,340	Schoop, P	Batteries, secondary	May 22, 1894
520,351	Blake, J. F	Alarms	May 22, 1894
520,356	Siemens, C. W	Railways, systems, conduit	May 22, 1894
520,359	Hunter, R. M	Metal working	May 22, 1894
520,360	Hunter, R. M	do	May 22, 1894
520,361	Hunter, R. M	Galvanometers	May 22, 1894
520,365	Lane and Perrin	Annunciators, drop	May 22, 1894
520,367	Locke, F. M	Insulators	May 22, 1894
520,378	Parson, E. A	Cut-outs, thermal	May 22, 1894
520,406	Boardman, A. F	Telephones, magnetic	May 29, 1894
520,412	Conover, C. E	Insulators	May 29, 1894
520,427	Hey, G. W	Telephones, calls, step-by-step	May 29, 1894
520,429	Hoggson, S. H	Batteries, galvanic	May 29, 1894
520,445	Misell, D	Igniting devices	May 29, 1894
520,446	Misell, D	Clocks, electric	May 29, 1894
520,467	Weber, W	Telephones, supports	May 29, 1894

No.	NAME.	CLASS.	DATE.
520,474	Ball, H. P.	Cut-outs, mechanical	May 29, 1894
520,520	Elkins, W. H.	Railway signals, cab, sectional rail	May 29, 1894
520,543	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	May 29, 1894
520,547	Thunhorst, F. J.	Telegraphy, fire, alarms and extinguishers	May 29, 1894
520,602	Luscomb, H. H.	Insulators	May 29, 1894
520,606	McCarthy, L.	Railways, conductor supports and insulators	May 29, 1894
520,620	Stanley, W., jr.	Motors, alternating	May 29, 1894
520,661	Selden and Riley	Railway signals, block	May 29, 1894
520,673	Farrar, W. B.	Medical and surgical, electrodes	May 29, 1894
520,710	Selden and Riley	Railway signals, block	May 29, 1894
520,737	Jones, B. J.	Railways, conductor supports and insulators	May 29, 1894
520,748	Bancroft, J. S.	Motors, hand-operating devices	May 29, 1894
520,758	Laurence, W.	Railways, systems, overhead, trolleys	June 5, 1894
520,763	Bell, L.	Motors alternating	June 5, 1894
520,764	Bell, L.	Regulators	June 5, 1894
520,772	Ekstrom, A.	Cut-outs, thermal	June 5, 1894
520,773	Erben, H. F. T.	Magneto-electric	June 5, 1894
520,776	Gibboney, J. W.	Telegraphy, lightning arresters	June 5, 1894
520,780	Henry, J. C.	Electric locomotives	June 5, 1894
520,781	Herrick, A. B.	Magneto-electric	June 5, 1894
520,782	Hinman, A.	Motors	June 5, 1894
520,784	Hopkins and Stebbins	Motors, hand-operating devices	June 5, 1894
520,786	Kinisiburgh, C. W.	Telephones, details	June 5, 1894
520,787	Knight, W. H.	Electric locomotives	June 5, 1894
520,788	Knowles and Park	Lights, arc, special features	June 5, 1894
520,789	Knowles, E. R.	Galvanometers	June 5, 1894
520,794	Lutz, W. D.	Elevators	June 5, 1894
520,800	Offrell, O.	Motors	June 5, 1894
520,809	Thomson, E.	Telegraphy, lightning arresters	June 5, 1894
520,810	Thomson, E.	Motors	June 5, 1894
520,811	Thomson, E.	Meters	June 5, 1894
520,820	Carter, Dawson and Meyrick	Igniting devices, automatic	June 5, 1894
520,822	Davis, C. E.	Motors, hand-operating devices	June 5, 1894
520,848	Henry, A. J.	Time checks	June 5, 1894
520,852	Knowles, E. R.	Cut-outs, mechanical, sliding	June 5, 1894
520,855	Lieb, C. A.	Insulators	June 5, 1894
520,908	Waite, H. F.	Inductoriums	June 5, 1894
520,926	Johnson, A. H.	Railway signals	June 5, 1894
520,937	McCarthy, L.	Railways, conductor supports and insulators	June 5, 1894
520,938	Plodock, P., sr.	Railways, systems, closed conduit	June 5, 1894
520,940	Sellers, C.	Magneto-electric	June 5, 1894
520,963	Knowles, E. R.	Galvanometers	June 5, 1894
520,964	Knowles, E. R.	do	June 5, 1894
520,965	Lamme, B. G.	Systems of distribution	June 5, 1894
520,970	Scott, C. F.	do	June 5, 1894
520,971	Smith and Clabaugh	Railways, systems, overhead	June 5, 1894
520,975	Westinghouse and Scott	Railways, systems, converters	June 5, 1894
520,996	Marks and Ransom	Lights, arc, gravity feed, gear-clutch	June 5, 1894
521,010	Brand, J. B.	Railways, systems, closed conduit	June 5, 1894
521,018	De Mott, J. Y.	Connectors	June 5, 1894
521,046	Ross, F. W.	Annunciators, drop	June 5, 1894
521,051	Scott, C. F.	Transmission of power	June 5, 1894
521,089	Reed, W. B.	Meters	June 5, 1894
521,124	Nichols and Lincoln	Railways, conductor supports and insulators	June 5, 1894
521,125	Phillips, J. J. E.	Conductors, underground	June 5, 1894
521,131	Voss, D. C.	Lights, incandescent	June 5, 1894
521,138	Crowdus, W. A.	Dental instruments	June 5, 1894
521,144	Thompson, T. J.	Annunciators, drop	June 5, 1894
521,163	Hawkesworth, R. M.	Railways, systems, overhead	June 12, 1894
521,168	Jungner, E. W.	Batteries, thermal	June 12, 1894
521,170	Kleber, O. L.	Telegraphy, printing, multiple wheel	June 12, 1894
521,183	Rolfe, C. A.	Telegraphy, fire, variable signal, dial	June 12, 1894
521,188	Stromberg and Carlson	Telephones, magnetic	June 12, 1894
521,220	Richards, W. L.	Telephones, granular	June 12, 1894
521,238	Herr, J.	Connectors	June 12, 1894
521,239	Hoopes, C. R.	Telegraphy, circuit closers	June 12, 1894
521,260	Dunbero and Mohrdieck	Batteries, galvanic	June 12, 1894
521,269	Michl, W. R.	Electro-magnets	June 12, 1894
521,274	Smith, J. B.	Telephones, switches	June 12, 1894
521,303	Wotton, J. A.	Telephones, systems, multiple switch-board	June 12, 1894
521,322	Peck, L. R.	Lights, sockets and keys	June 12, 1894
521,325	Smith, J. B.	Telephones, granular	June 12, 1894
521,326	Alexander, H.	Railways, systems, closed conduit	June 12, 1894
521,331	Buzby, C. E.	Measuring instruments, balances	June 12, 1894
521,362	Beseler, C.	Lights, arc, special features	June 12, 1894
521,394	Thomson, W.	Meters	June 12, 1894



No.	NAME.	CLASS.	DATE.
521,396	Vidal and Hervieu	Clocks, electric	June 12, 1894
521,412	Johnson, L. F.	Railway signals, sectional rail	June 12, 1894
521,422	Smith, W. F.	Recorders	June 12, 1894
521,423	Stanley, L. T.	Electro-magnetic	June 12, 1894
521,434	Edens and Brewer	Lights, arc, gravity feed, gear-clutch	June 12, 1894
521,435	Farmer, J. R.	Railway signals, sectional rail	June 12, 1894
521,436	Fay, T. J.	Lighting, systems, automatic regulation	June 12, 1894
521,455	Alsop, C. R.	Railway signals, track instrument	June 19, 1894
521,461	Fisk, H. M.	Telephones, switch-boards	June 19, 1894
521,514	Stromberg and Carlson	Telephones, switches	June 19, 1894
521,516	Todd, A. H.	Igniting devices, portable	June 19, 1894
521,550	Pope, E.	Telegraphy, printing	June 19, 1894
521,553	Samuels, B.	Railway signals, cab, sectional rail	June 19, 1894
521,562	Armat, T.	Railways, systems, closed conduit	June 19, 1894
521,594	Miles, E. M.	Medical and surgical, body-wear	June 19, 1894
521,602	Cates, O. G.	Railways, systems, overhead, trolleys	June 19, 1894
521,651	Henry, J. C.	Motors	June 19, 1894
521,666	Offrell, O.	Regulators, alternating	June 19, 1894
521,671	Rice, E. W., jr.	Magneto-electric	June 19, 1894
521,684	Thomson, E.	Meters	June 19, 1894
521,685	Thomson, E.	do	June 19, 1894
521,711	Harris, T.	Railways, closed conduit	June 19, 1894
521,721	Mayr, G.	Lights, incandescent, special features	June 19, 1894
521,798	Johnson, S. P.	Lights, arc, gravity feed, gear-clutch	June 26, 1894
521,799	Lee, J.	Motors	June 26, 1894
521,800	Leech, G. A.	Medical and surgical	June 26, 1894
521,808	McLaughlin, J. F.	Telegraphy, circuit closers	June 26, 1894
521,809	McLaughlin, J. F.	Lights, sockets and keys	June 26, 1894
521,843	Baker, B. E.	Rheostats	June 26, 1894
521,867	Seaverus, E. B. V.	Lighting, systems	June 26, 1894
521,877	Davy, W. J.	Lights, arc, gravity feed, gear-clutch	June 26, 1894
521,891	Reed, C. J.	Railways, systems	June 26, 1894
521,892	Reed, C. J.	do	June 26, 1894
521,908	Curry, J. H.	Lighting, systems	June 26, 1894
521,924	Wright, P.	System of distributions	June 26, 1894
521,925	Wright, P.	Lighting, systems	June 26, 1894
521,936	Marks, L. B.	Lights, arc, special features	June 26, 1894
521,952	Faries, R.	Lights, incandescent, special features	June 26, 1894
521,976	Endeam, O. W. T.	Alarms	June 26, 1894
522,022	Maxim, H. F.	Telegraphy, circuit closers, thermal	June 26, 1894
522,051	Fuller, R.	Magneto-electric	June 26, 1894
522,052	Fyfe, J. C.	do	June 26, 1894
522,055	Hall, D. F.	Telegraphy, circuit closers, thermal	June 26, 1894
522,057	Heastings, E. F. A.	Railways, systems, overhead, trolleys	June 26, 1894
522,067	Lundell, R. L.	Electric locomotives	June 26, 1894
522,083	Paget, L.	Magneto-electric	June 26, 1894
522,175	Anderson, J. M.	Insulators	June 26, 1894
522,180	McTighe, T. J.	Railways, conductor supports and insulators	June 26, 1894
11,423	Stromberg, A.	Alarms, burglar	June 26, 1894
	(Reis.)		



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# APPENDIX No. XIII.

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## PART III.

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CONSISTING OF A

ALPHABETICAL INDEX OF ALL PATENTS

RELATING TO

**ELECTRICITY.**

Issued from July 1, 1893, to June 30, 1894, inclusive, giving names of Inventors, numbers and dates of Patents, and the sub-class to which each belongs.

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# ALPHABETICAL INDEX

OF

## PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1893, TO JUNE 30, 1894.

No.	NAME.	CLASS.	DATE.
508,392	Adair and Kluver	Lights, arc, gravity feed, clutch	Nov. 7, 1893
503,568	Adams, A. D.	Motors, hand-operating devices	Aug. 22, 1893
509,713	Adams, N. F.	Cut-outs, thermal	Nov. 28, 1893
506,577	Adams and Adams	Inductoriums, stationary	Oct. 10, 1893
514,584	Ahlbers, R.	Alarms, burglar	Feb. 13, 1894
507,641	Akarman and Le Noir	Railways, systems, overhead	Oct. 31, 1893
502,454	Alberg, A.	Meters	Aug. 1, 1893
521,326	Alexander, H.	Railways, systems, closed conduit	June 12, 1894
506,297	Alexander, W. W.	Cut-outs, mechanical	Oct. 10, 1893
517,401	Allen, C. E.	Telegraphy, circuit closers	Mar. 27, 1894
517,402	Allen, C. E.	do	Mar. 27, 1894
519,519	Allen, E. H.	Railways, systems, overhead	May 8, 1894
509,279	Allen, H. A.	Motors, hand-operating devices	Nov. 21, 1893
503,570	Allison, J. H.	Railways, systems, overhead, trolleys	Aug. 22, 1893
503,115	Allison, W. D.	Telephones, systems	Aug. 15, 1893
521,455	Alsop, C. R.	Railway signals, track instrument	June 19, 1894
513,612	Alteneck, F. von Hefner	Telegraphy, perforating	Jan. 30, 1894
504,484	Amher, A. S.	Railways, systems, batteries	Sept. 5, 1893
500,545	Anders, G. L.	Telephones, systems	July 4, 1893
513,859	Anderson, C. G.	Electric locomotives	Jan. 30, 1894
506,617	Anderson, J. M.	Railways, systems, overhead, trolleys	Oct. 10, 1893
522,175	Anderson, J. M.	Insulators	June 26, 1894
502,804	Andrus, D. P.	Medical and surgical, body-wear	Aug. 8, 1893
511,720	Angell and Porter	Lights, incandescent, special features	Dec. 26, 1893
513,362	Ansley, J. D.	Railways, systems, overhead, trolleys	Apr. 17, 1894
516,071	Applegard, A. E.	Heaters, electric	Mar. 6, 1894
521,562	Armat, T.	Railways, systems, closed conduit	June 19, 1894
517,531	Arnold, B. J.	Magneto-electric	Apr. 10, 1894
507,978	Arnold, C. R.	Lights, incandescent	Nov. 7, 1893
514,112	Ashley, F. M.	Railways, systems, closed conduit	Feb. 6, 1894
514,113	Ashley, F. M.	do	Feb. 6, 1894
513,114	Ashley, F. M.	do	Feb. 6, 1894
505,783	Ashley, R.	Magneto-electric	Sept. 26, 1893
517,017	Ashwell and Tuttle	Lights, incandescent	Mar. 27, 1894
505,183	Atwater, A. S.	Lights, arc, non-feeding	Sept. 19, 1893
505,184	Atwater, A. S.	Magneto-electric	Sept. 19, 1893
505,622	Atwater, A. S.	do	Sept. 26, 1893
510,952	Averill, F. E.	do	Dec. 19, 1893
513,975	Ayrton and Mather	Galvanometers	Feb. 6, 1894
516,341	Ayrton and Mather	do	Mar. 13, 1894
507,522	Ayton, C. W.	Steering and propulsion	Oct. 31, 1893
501,755	Bain, F.	Metal working, heating	July 18, 1893
521,843	Baker, B. E.	Rheostats	June 26, 1894
517,018	Ballard, G. L.	Batteries, secondary	Mar. 27, 1894
500,585	Ball, H. P.	Lights, sockets and keys	July 18, 1893
509,014	Ball, H. P.	Lights, arc, gravity feed, clutch	Nov. 21, 1893
518,213	Ball, H. P.	Railways, conductor supports and insulators	Apr. 17, 1894
513,214	Ball, H. P.	do	Apr. 17, 1894
520,474	Ball, H. P.	Cut-outs, mechanical	May 29, 1894
506,459	Ball, R. E.	Lights, filaments and carbons	Oct. 10, 1893
518,773	Balsley, W. H.	Telephones, systems	Apr. 24, 1894
504,462	Balsley, W. A.	Telephones, switch-boards	Sept. 5, 1893
520,748	Bancroft, J. S.	Motors, hand-operating devices	May 29, 1894
518,540	Banholzer, P. P.	Railways, systems, conduit	Apr. 17, 1894
503,712	Banta, W. E.	Conductors	Aug. 22, 1893
511,187	Barber, E. A.	Regulators	Dec. 19, 1893
514,378	Barker, H. C.	Indicators	Feb. 13, 1894
511,188	Barnard, G. L.	Alarms	Dec. 19, 1893
516,043	Barney, E.	Telegraphy, circuit closers, thermal	Mar. 6, 1894
502,166	Barrett, P. J.	Lights, arc, gravity feed, clutch	July 25, 1893
501,049	Bassett, N. C.	Magneto-electric	July 11, 1893
503,669	Bassett, N. C.	Railways, systems, overhead	Nov. 14, 1893
516,792	Bassett, N. C.	Magneto-electric	Mar. 20, 1894

No.	NAME.	CLASS.	DATE.
503,108	Bates, J. H	Lights, incandescent	Aug. 8, 1893
503,567	Bates, J. M	Railways, systems, closed conduit	Aug. 15, 1893
502,168	Battley, S. B	Pneumatics, navigation, aerial	July 25, 1893
518,731	Bauer, F. R	Electrolysis, aqueous bath	Apr. 24, 1894
516,516	Baxter, W., jr	Electric locomotives	Mar. 13, 1894
519,280	Baxter, W	Magneto-electric	May 1, 1894
519,281	Baxter, W	do	May 1, 1894
514,115	Bayer, F	Batteries, galvanic	Feb. 6, 1894
504,951	Bayles, R. N	Magneto-electric	Sept. 12, 1893
514,056	Beadsley, R. C	Railways, systems, closed conduit	Feb. 6, 1894
510,059	Beard, A. H	Motors	Dec. 5, 1893
513,630	Beard, C	Conductors	Jan. 30, 1894
519,938	Beattie, F	Railway signals, cab, sectional rail	May 15, 1894
515,274	Beckman, H. C	Indicators	Feb. 20, 1894
505,808	Beland, T	Lighting, systems	Oct. 3, 1893
511,495	Belfield, R	Lights, arc, gravity feed, gear-clutch	Dec. 26, 1893
507,403	Bell, C	Connectors	Oct. 24, 1893
502,693	Bell, L	Galvanometers	Aug. 8, 1893
505,505	Bell, L	Regulators, alternating	Sept. 26, 1893
510,465	Bell, L	do	Dec. 12, 1893
516,794	Bell, L	Magneto-electric	Mar. 20, 1894
516,795	Bell, L	Motors alternating	Mar. 20, 1894
516,796	Bell, L	do	Mar. 20, 1894
516,797	Bell, L	Magneto-electric	Mar. 20, 1894
518,217	Bell, L	Regulators, alternating	Apr. 17, 1894
518,218	Bell, L	Motors, hand-operating devices	Apr. 17, 1894
520,763	Bell, L	Motors, alternating	June 5, 1894
520,764	Bell, L	Regulators	June 5, 1894
501,859	Bell, O. A	Telephones, switches	July 18, 1893
505,798	Bell, O. A	Telephones, switch-board	Sept. 26, 1893
507,983	Bell, O. A	Telephones, systems, multiple switch-board, divided central.	Nov. 7, 1893
511,286	Denccke, A. O	Rheostats	Dec. 19, 1893
506,463	Benjamin, G. H	Railways, systems, overhead, trolleys	Oct. 10, 1893
513,519	Bennett, D. T	Railways, conductor supports and insulators	Aug. 15, 1893
510,466	Bennett, E. H	Motors	Dec. 12, 1893
512,923	Benthuyssen, W. V	Railways, systems, overhead, trolleys	Jan. 16, 1894
502,272	Bentley, E. M	Lighting, systems, hand regulators	Aug. 1, 1893
511,988	Bentley, E. M	Electric locomotives	Jan. 2, 1894
505,268	Benton, G. D. and Angell, E. E	Metal working	Sept. 19, 1893
508,799	Benton, O. B	Railways, systems, closed conduit	Nov. 7, 1893
501,757	Bergmann, S	Lights, arc, gravity-feed, gear-clutch	July 18, 1893
501,758	Bergmann, S	Lights, arc, special features	July 18, 1893
501,911	Bergmann, S	do	July 25, 1893
502,273	Bergmann, S	do	Aug. 1, 1893
514,057	Bergmann, S	do	Feb. 6, 1894
514,058	Bergmann, S	do	Feb. 6, 1894
506,733	Berge, H. and F. G. A	do	Oct. 17, 1893
501,861	Berliner, A. D	Medical and surgical, body-wear	July 18, 1893
501,905	Bernhardt, C	Telegraphy, fire, automatic	July 18, 1893
504,148	Berrigan, W. H	Telegraphy, circuit closers	Aug. 29, 1893
506,658	Berthon, L. A	Telephones, systems, multiple switch-board, test.	Oct. 17, 1893
510,317	Berry, C. M	Lights, incandescent, special features	Dec. 5, 1893
521,362	Bescler, C	Lights, arc, special features	June 12, 1894
517,997	Biddle and Kennedy	Electric locomotives	Apr. 10, 1894
517,998	Biddle and Kennedy	Lighting, systems, car	Apr. 10, 1894
504,549	Bidwell, B.	Railways, systems, conduit	Sept. 5, 1893
505,346	Bierley, H. A	Lighting, systems	Sept. 19, 1893
506,092	Billberg, C. O. C	Rheostats	Oct. 3, 1893
506,149	Binford, E. R	Railways, systems, converters	Oct. 3, 1893
518,133	Blake, J. F	Alarms	Apr. 10, 1894
518,481	Blake, J. F	do	Apr. 17, 1894
520,351	Blake, J. F	do	May 22, 1894
516,343	Blake and Lacey	Elevators	Mar. 13, 1894
503,693	Blasser, E	Lights, incandescent, special features	Aug. 22, 1893
501,488	Blood, J. B	Electric locomotives	July 18, 1893
503,449	Blood, J. B	Magneto-electric	Aug. 15, 1893
514,695	Bloomer, C. T	Telephones, electric	Feb. 13, 1894
519,400	Blumenberg, H., jr	Electrolysis, aqueous bath, chemicals	May 8, 1894
510,320	Boardman, A. T	Telephones, systems, details	Dec. 5, 1893
520,406	Boardman, A. F	Telephones, magnetic	May 29, 1894
507,671	Boehlen, A	Motors, reciprocating	Oct. 31, 1893
507,205	Bogart, S. S	Telephones, calls, step-by-step	Oct. 24, 1893
507,206	Bogart, S. S	do	Oct. 24, 1893
505,087	Booth, J. B. S. and Falconer, E. J	Telephones, magnetic	Sept. 19, 1893
509,290	Boughton, C. V	Telegraphy, circuits and systems	Nov. 21, 1893



No.	NAME.	CLASS.	DATE.
512,797	Bowen, W. J	Heaters	Jan. 16, 1894
512,535	Boynton, E. M	Railways, systems, overhead, trolleys	Jan. 9, 1894
503,574	Bradley, C. S	Magneto-electric	Aug. 22, 1893
514,902	Bradley, C. S	Motors, alternating	Feb. 20, 1894
514,903	Bradley, C. S	do	Feb. 20, 1894
514,904	Bradley, C. S	do	Feb. 20, 1894
514,586	Bradley, C. S	Transmission of power	Feb. 13, 1894
519,376	Bradley, C. S	Inductoriums, transformers, stationary	May 8, 1894
519,377	Bradley, C. S	Transmission of power	May 8, 1894
504,196	Bradley, J. L	Telegraphy, fire, automatic	Aug. 29, 1893
509,867	Brady, C. G	Telephones, systems, details	Dec. 5, 1893
514,697	Bradt, W. H	Alarms	Feb. 13, 1894
508,083	Brain, C. T. B	Railways, systems, closed conduit	Nov. 7, 1893
521,010	Brand, J. B	do	June 5, 1894
506,358	Brauth, J. F. S	Electric locomotives	Oct. 10, 1893
515,648	Breese, C. P	Railway signals, sectional rail	Feb. 27, 1894
505,243	Bristol, W. H	Meters	Sept. 19, 1893
514,258	Bristol and Bristol	Galvanometers	Feb. 6, 1894
511,928	Brockbank, H. M	Railways, conductor supports and insulators	Jan. 2, 1894
519,171	Brooks, D	Conductors, underground	May 1, 1894
515,900	Brown, C. E. L	Motors, alternating	Mar. 6, 1894
516,626	Brown, E. H	Railways, systems, closed conduit	Mar. 13, 1894
515,280	Brown, G. A	Rheostats	Feb. 20, 1894
515,281	Brown, G. A	Elevators	Feb. 20, 1894
506,582	Brown, G. W	Telegraphy, fire, automatic	Oct. 10, 1893
518,913	Brown, G. W	Magneto-electric	Apr. 24, 1894
507,257	Brown, H. H	Conductors	Oct. 24, 1893
518,221	Brown, H. P	Electric locomotives	Apr. 17, 1894
518,561	Brown, H. P	Motors	Apr. 17, 1894
518,562	Brown, H. P	Magneto-electric	Apr. 17, 1894
501,610	Brown, J. A	Telephones, magnetic	July 18, 1893
504,891	Brown, J. A	Telephones, electric	Sept. 12, 1893
506,305	Brown, J. A	Telephones, magnetic	Oct. 10, 1893
511,115	Brown, J. A	do	Dec. 19, 1893
501,242	Browne, J. E	Telegraphy, lightning arresters	July 11, 1893
520,156	Brown, T. M	Railways, systems, overhead, trolleys	May 22, 1894
513,300	Brown, W. L	Igniting devices, manual	Jan. 23, 1894
511,503	Bruger, T	Galvanometers	Dec. 26, 1893
514,907	Brush, C. F	Magneto-electric	Feb. 20, 1894
509,297	Bryant, W. C	Lights, sockets and keys	Nov. 21, 1893
502,655	Bryant, W. C	do	Aug. 1, 1893
502,948	Buchanan, L. H	Lights, arc, positive feed, gear-clutch	Aug. 8, 1893
505,215	Buffington, E. W	Insulators	Sept. 19, 1893
506,841	Bulen, G. F	Telegraphy, fire, alarms and extinguishers	Oct. 17, 1893
506,973	Buck, L. P. and Sweeten, F. D	Telegraphy, printing	Oct. 17, 1893
511,401	Bullie, L	Meters	Dec. 26, 1893
501,405	Burchell, N. L. and Nevius, B. L., jr	Telephones, supports	July 11, 1893
509,873	Burns, M. J	Telegraphy, fire, variable signal, dial	Dec. 5, 1893
500,849	Burnett, H. D. and Doane, S. E	Lights, incandescent	July 4, 1893
505,913	Burnett, H. D. and Doane, S. E	do	Oct. 3, 1893
516,800	Burnett and Doane	do	Mar. 20, 1894
502,246	Burnett, W. S	Phonographs, coin-controlled apparatus	July 25, 1893
516,641	Burns, M. J	Telegraphy, fire, variable signal, dial	Mar. 20, 1894
516,642	Burns, M. J	Telephones, magnetic	Mar. 20, 1894
516,643	Burns, M. J	do	Mar. 20, 1894
514,845	Burns, P. C	Batteries, galvanic	Feb. 13, 1894
510,156	Burby, J	Telegraphy, relays and sounders	Dec. 5, 1893
506,034	Burtshaell, S. W	Lights, incandescent, special features	Oct. 3, 1893
521,331	Bnzby, C. E	Measuring instruments, balances	June 12, 1894
501,558	Cabot, J. A	Systems of distribution	July 18, 1893
509,116	Callahan, F	Telegraphy, fire, engine-house apparatus	Nov. 21, 1893
511,873	Callender, R	Cut-outs, electro-magnetic	Jan. 2, 1894
512,874	Callender, R	Telephones, automatic	Jan. 2, 1894
511,575	Callender, R	do	Jan. 2, 1894
515,103	Callender, R	do	Feb. 20, 1894
515,109	Callender, R	Cut-outs, electro-magnets	Feb. 20, 1894
515,110	Callender, R	Telegraphy, fire, variable signal, dial	Feb. 20, 1894
514,641	Campiche, H	Clocks, electric	Feb. 13, 1894
519,115	Cantrell, M. C	Telegraphy, circuits and systems, thermal	Dec. 5, 1893
506,415	Capek, J. V	Telephones electric	Oct. 10, 1893
518,710	Carmichael, H	Electrolysis, aqueous bath, chemicals	Apr. 24, 1894
511,497	Carpenter, C. E	Rheostats	Dec. 26, 1893
519,662	Carpenter, C. F	Motors, reciprocating	May 8, 1894
514,260	Carpenter, H. H	Batteries, secondary	Feb. 6, 1894
500,631	Carruther, S. H	Medical and surgical, electrodes	July 4, 1893
507,526	Carstarphen, W. P	Inductoriums, transformers, stationary	Oct. 31, 1893
503,129	Carstarphen, W. P	Motors	Nov. 7, 1893

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520,820	Carter, Dawson and Meyrick	Igniting devices, automatic	June 5, 1894
505,188	Carty, J. J.	Telephones, systems	Sept. 19, 1893
518,392	Carty, J. J.	do	Apr. 17, 1894
512,464	Carey, A. C.	Batteries, secondary	Jan. 9, 1894
517,432	Cary, A. C.	Lights, incandescent	Apr. 3, 1894
501,491	Cary, E. E.	do	July 18, 1893
503,650	Cary, E. E. and Nickerson, W. E.	do	Aug. 22, 1893
503,669	Cary, E. E. and Nickerson, W. E.	do	Aug. 22, 1893
503,670	Cary, E. E. and Nickerson, W. E.	do	Aug. 22, 1893
503,671	Cary, E. E. and Nickerson, W. E.	do	Aug. 22, 1893
500,851	Case, L. W.	Electric locomotives	July 4, 1893
503,451	Case, W. E.	Electrolysis, fused bath	Aug. 15, 1893
515,572	Cassidy and Butler	Railways, systems, closed conduit	Feb. 27, 1894
512,602	Cates, O. G.	Railways, systems, overhead, trolleys	June 19, 1894
509,651	Chabeauet, E.	Railways, systems, closed conduit	Nov. 28, 1893
511,682	Chalandre, A. J. O.	Electrolysis, aqueous bath, chemical	Dec. 26, 1893
508,533	Chase, J.	Railways, systems, overhead, trolleys	Nov. 14, 1893
502,702	Chesney, C. C.	Lighting, systems	Aug. 8, 1893
513,482	Chick, H. F.	Conductors, anti-inductive	Jan. 30, 1894
513,982	Chick, H. F.	Conductors	Feb. 6, 1894
512,805	Childs, W. A.	Telephones, switch-boards	Jan. 16, 1894
508,563	Christie, S. E.	Telegraphy, fire	Nov. 14, 1893
517,028	Church, F. S.	Railways, systems, overhead, trolleys	Mar. 27, 1894
509,842	Clark, E. P.	Lights, arc, gravity feed, gear-clutch	Nov. 28, 1893
509,363	Clark, J. H.	Motors, hand-operating devices	Nov. 28, 1893
503,562	Clark, J. W.	Railways, systems, overhead, trolleys	Aug. 15, 1893
502,614	Clarke, E. H.	Insulators	Aug. 1, 1893
516,152	Cochrane, A.	Heaters	Mar. 6, 1894
501,825	Coffin, C. L.	Metal working	July 18, 1893
507,419	Coffin, C. L.	do	Oct. 24, 1893
508,284	Coffin, C. L.	Heaters	Nov. 7, 1893
512,602	Coffin, C. L.	Furnaces	Jan. 2, 1894
512,603	Coffin, C. L.	Inductariums, transformers, stationary	Jan. 9, 1894
512,604	Coffin, C. L.	Metal working	Jan. 9, 1894
515,652	Coffin, C. L.	do	Feb. 27, 1894
520,299	Coffin, C. L.	do	May 22, 1894
520,300	Coffin, C. L.	do	May 22, 1894
510,892	Coffman, J. R.	Magneto-electric	Dec. 19, 1893
506,001	Coldren, W. P.	Motors, hand-operating devices	Oct. 3, 1893
516,916	Coleman, C. J.	Electric locomotives	Mar. 20, 1894
516,917	Coleman, C. J.	Motors	Mar. 20, 1894
518,092	Collier, A. T.	Electro-magnets	Apr. 10, 1894
502,091	Colvin, F. R.	Telephones, systems	July 25, 1893
504,103	Colvin, F. R.	do	Aug. 29, 1893
511,589	Colvin, F. R.	do	Dec. 26, 1893
513,305	Colvin, F. R.	Telephones, electric	Jan. 23, 1894
517,263	Colvin, F. R.	Telephones, switches	Mar. 27, 1894
515,654	Comstock, B. F.	Railways, systems, overhead, trolleys	Feb. 27, 1894
504,104	Conklin, J. S.	Railways, systems, closed conduit	Aug. 29, 1893
507,997	Conklin, J. S.	Electric locomotives	Nov. 7, 1893
511,196	Conklin, O. F.	Motors	Dec. 19, 1893
516,263	Conklin, O. F.	do	Mar. 13, 1894
504,200	Conkling, G.	Mills, magnetic separators	Aug. 29, 1893
504,201	Conkling, G.	do	Aug. 29, 1893
518,713	Connell, W. H.	Lights, incandescent, special features	Apr. 24, 1894
518,939	Conner, D. E.	Railways, systems, closed conduit	May 1, 1894
514,212	Connolly, J. N.	Bells	Feb. 6, 1894
508,370	Connor, W. A.	Conductors	Nov. 7, 1893
511,234	Conrad, A. F.	Telegraphy, transmitters	Dec. 19, 1893
520,412	Conover, C. E.	Insulators	May 29, 1894
519,380	Cook, J. F.	Railways, systems, conduit	May 8, 1894
514,913	Cook, V. A.	Telephones, details	Feb. 20, 1894
507,217	Coombs, C. L.	Heaters, stoves and furnaces	Oct. 24, 1893
518,345	Cooper, W.	Motors, hand-operating devices	Apr. 17, 1894
506,002	Cousens, A. C.	Insulators	Oct. 3, 1893
506,627	Cousens, A. C.	Telephones, electric	Oct. 10, 1893
515,465	Cottrell, H.	Lights, incandescent	Feb. 27, 1894
518,916	Cottrell, H.	Telephones, multiple electrode	Apr. 24, 1894
518,542	Cox, H. B.	Batteries, thermal	Apr. 17, 1894
520,106	Cox, H. B.	Telephones, electric	May 22, 1894
509,201	Crabtree, L. T.	Railway signals	Nov. 21, 1893
501,676	Craig, L. D.	Street cars	July 18, 1893
504,774	Craney, T.	Electrolysis, aqueous bath apparatus	Sept. 12, 1893
518,179	Criggal, J. E.	Lights, incandescent	Apr. 10, 1894
516,298	Crouch, F. J.	Magneto-electric	Mar. 13, 1894
519,446	Crouse and Butledge	Railways, conductor supports and insulators	May 8, 1894
511,758	Crowders, W. A.	Motors	Jan. 2, 1894



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521,138	Crowders, W. A	Dental instruments	June 5, 1894
519,837	Cruser, V. D	Railways, systems, overhead, trolleys	May 15, 1894
508,208	Cullingworth, A. M	Regulators	Nov. 7, 1893
516,565	Cummings, J. F	Railways, systems, closed conduit	Mar. 13, 1894
521,908	Curry, J. H	Lighting, systems	June 26, 1894
505,594	Curtis, C. G	Motors	Sept. 26, 1893
510,898	Curtis, F. G	Connectors	Dec. 19, 1893
511,514	Curtis, F. G	Batteries, galvanic	Dec. 26, 1893
518,877	Curwhen, S. H	Locks, electric	Apr. 24, 1894
508,091	Cutten, E. B	Electrolysis, aqueous bath, anodes	Nov. 7, 1893
510,899	Cutten, E. B	do	Dec. 19, 1893
510,900	Cutten, E. B	Electrolysis, aqueous bath, chemicals	Dec. 19, 1893
510,901	Cutten, E. B	Electrolysis, aqueous bath, anodes	Dec. 19, 1893
510,902	Cutten, E. B	do	Dec. 19, 1893
515,145	Cyepull, J. J	Railway signals, cab, sectional rail	Feb. 20, 1894
515,397	Dahlgreen, J. O	Igniting devices, manual	Feb. 27, 1894
509,072	Dale, J. H	Railways, systems, closed conduit	Nov. 21, 1893
515,751	Dalton and Dalton	Railway signals, block	Mar. 6, 1894
517,445	Dashiell, J. M	Coin-controlled apparatus	Apr. 3, 1894
504,866	Davenport, F. W	Lights, incandescent, special features	Sept. 12, 1893
501,183	Daves, W	Railway signals, sectional rail	July 11, 1893
503,453	Davidson, J. E	Regulators	Aug. 15, 1893
508,000	Davidson, J. C	Transmission of power	Nov. 7, 1893
520,822	Davis, C. E	Motors, hand-operating devices	June 5, 1894
503,279	Davis, H. P	do	Aug. 15, 1893
513,457	Davis, H. P	Rheostats	Jan. 23, 1894
506,208	Davis, J. A. and Fowden, R. A	Telegraphy, printing	Oct. 10, 1893
506,209	Davis, J. A. and Fowden, R. A	do	Oct. 10, 1893
521,877	Davy, W. J	Lights, arc, gravity feed, gear-clutch	June 26, 1894
502,226	Dean, S. A	Time checks	July 25, 1893
502,811	Deane, W. H	Time alarms	Aug. 8, 1893
517,564	Deckert, W	Telephones, electric	Apr. 3, 1894
500,563	Decrow, W. E	Telegraphy, fire, variable signal, dial	July 4, 1893
507,791	Delaney, P. B	Telegraphy, automatic	Oct. 31, 1893
510,002	Delany, P. B	Telegraphy, circuits and systems	Dec. 5, 1893
510,003	Delany, P. B	do	Dec. 5, 1893
510,004	Delany, P. B	do	Dec. 5, 1893
510,005	Delany, P. B	Telegraphy, automatic	Dec. 5, 1893
510,006	Delany, P. B	do	Dec. 5, 1893
510,007	Delany, P. B	Telegraphy, circuits and systems	Dec. 5, 1893
513,894	Demmick, G. W	Railways, systems, closed conduit	Jan. 30, 1894
515,801	Demmick, G. W	Lamp and gas fittings, guards	Mar. 20, 1894
501,768	Dempster, J. T	Lights, arc, gravity feed, gear-clutch	July 18, 1893
521,018	De Mott, J. Y	Connectors	June 5, 1894
516,524	Denison, J. F	Motors	Mar. 13, 1894
510,061	De Voe, W. R	Railways, systems, conduit	Dec. 5, 1893
510,634	De Voe, W. R	do	Dec. 12, 1893
520,304	De Voe, W. R	do	May 22, 1894
515,822	Deweese, T. J	Conductors	Mar. 6, 1894
515,909	Deweese, T. J	do	Mar. 6, 1894
513,895	Dewey, M. W	Electric locomotives	Jan. 30, 1894
516,188	Dewey, M. W	Railways, systems, converter	Mar. 13, 1894
504,123	Dey, C. E	Cut-outs, mechanical, oscillating snap	Aug. 29, 1893
509,614	Dey, C. H	Railways, conductor supports and insulators	Nov. 28, 1893
518,444	Dickeman, H. E	Magneto-electric	Apr. 17, 1894
513,459	Dieckmann, G. F	do	Jan. 23, 1894
504,581	Diehl, P	do	Aug. 22, 1893
501,707	Dingle, W. H. and Urquhart, J. M	Cut-outs, mechanical, oscillating snap	July 18, 1893
518,365	Dinke, A. C	Rheostats	Apr. 17, 1894
501,708	Doane, F. H	Telegraphy, fire	July 18, 1893
502,553	Dobbie, R. S	Railways, systems, overhead, trolleys	Aug. 1, 1893
513,006	Dobrowolsky, M. von Dolivo	Lighting, systems	Jan. 16, 1894
516,478	Donnelly, J. R	Locks, electric	Mar. 13, 1894
511,731	Doolittle, T. B	Annunciators, drop	Dec. 26, 1893
506,646	Dorenwend, C. H	Telephones, details	Oct. 10, 1893
515,488	Doriot, C	Motors	Feb. 27, 1894
505,819	Downs, H. T	Annunciators, step-by-step	Oct. 3, 1893
502,487	Drake, C. C	Telegraphy, fire, engine house apparatus	Aug. 1, 1893
514,916	Drawbaugh, D	Telephones, electric	Feb. 20, 1894
511,882	Drew, S. C	do	Jan. 2, 1894
514,817	Dufanet, O	Magneto-electric	Feb. 13, 1894
501,185	Dunbar, F. W	Annunciators, step-by-step	July 11, 1893
502,660	Dunbar, F. W	Telephones, systems, multiple switch-board, divided central	Aug. 1, 1893
509,367	Dunbar and Dunbar	Telephones, systems, multiple switch-board, test	Nov. 28, 1893
521,260	Dunbero and Mohrdieck	Batteries, galvanic	June 12, 1894



No.	NAME.	CLASS.	DATE.
500,868	Duncan, T	Meters	July 4, 1893
501,000	Duncan, T	do	July 4, 1893
518,310	Duncan, T	Motors, alternating	Apr. 17, 1894
518,311	Duncan, T	Meters	Apr. 17, 1894
519,497	Dunish, A	Telegraphy, circuit closers, thermal	May 8, 1894
511,763	Dunker, W. F.	Railways, systems, overhead, trolleys	Jan. 2, 1894
515,755	Dunn, G. S.	Motors	Mar. 6, 1894
511,883	Dupern, A. R.	Telephones, details	Jan. 2, 1894
515,286	Dyer, F. L.	Steering and propulsion	Feb. 20, 1894
502,431	Eames, H. H.	Electrolysis, fused bath	Aug. 1, 1893
521,434	Edens and Brewer	Lights, arc, gravity feed, gear-clutch	June 12, 1894
509,517	Edison, T. A.	Regulators	Nov. 28, 1893
509,518	Edison, T. A.	Railways, systems, converters	Nov. 28, 1893
512,872	Edison, T. A.	Telegraphy, duplex	Jan. 16, 1894
505,351	Edwards, E. A.	Lighting, systems, car	Sept. 19, 1893
512,672	Egan, S. E.	Telegraphy, circuit closers, thermal	Jan. 9, 1894
518,312	Egger and Wessel	Magneto-electric	Apr. 17, 1894
511,599	Eglin, W.	Telegraphy, fire	Dec. 26, 1893
505,822	Egner, F.	Lighting, systems	Oct. 3, 1893
502,287	Ehrlich, L.	Measuring instruments, cash register	Aug. 1, 1893
510,472	Eickemeyer, R.	Magneto-electric	Dec. 12, 1893
520,228	Eickemeyer, R.	Electric locomotives	May 22, 1894
501,205	Ekstrom, A.	Lights, sockets and keys	July 11, 1893
518,231	Ekstrom, A.	Cut-outs, mechanical	Apr. 17, 1894
520,772	Ekstrom, A.	Cut-outs, thermal	June 5, 1894
518,667	Elden, J.	Locks, electric	Apr. 24, 1894
504,914	Eldredge, R.	Magneto-electric	Sept. 12, 1893
506,481	Elieson, C. P.	Motors	Oct. 10, 1893
519,602	Elieson, C. P.	Batteries, secondary	May 8, 1894
501,059	Elkins, W. H.	Regulators	July 11, 1893
502,285	Elkins, W. H.	do	Aug. 1, 1893
505,914	Elkins, W. H.	do	Oct. 3, 1893
506,482	Elkins, W. H.	do	Oct. 10, 1893
518,232	Elkins, W. H.	do	Apr. 17, 1894
519,858	Elkins, W. H.	do	May 15, 1894
520,520	Elkins, W. H.	Railway signals, cab, sectional rail	May 29, 1894
511,328	Emery, C. E.	Magneto-electric	Dec. 26, 1893
517,948	Emery, C. E.	Electric locomotives	Apr. 10, 1894
501,996	Emmens, S. H.	Electrolysis, aqueous bath	July 25, 1893
501,997	Emmens, S. H.	do	July 25, 1893
503,788	Emmet, W. Le R.	Telegraphy, lightning arresters	Aug. 22, 1893
521,976	Endeavor, O. W. T.	Alarms	June 26, 1894
519,332	Engel, H.	do	May 8, 1894
515,665	English, J. W.	Annunciators, drop	Feb. 27, 1894
514,120	Enholm, O. A.	Railways, systems, closed conduit	Feb. 6, 1894
504,336	Enholm, W. C.	Medical and surgical, body-wear	Sept. 5, 1893
520,773	Erben, H. F. T.	Magneto-electric	June 5, 1894
506,169	Esmund, E. R.	Elevators	Oct. 3, 1893
511,131	Espinso, J. O. Y.	Railway signals, cab, sectional rail	Dec. 19, 1893
503,030	Essicks, W. B.	Railways, conductor supports and insulators	Aug. 8, 1893
501,246	Eustis, W. E. C.	Electric locomotives	July 11, 1893
503,589	Evershed, S.	Batteries, galvanic	Aug. 22, 1893
521,952	Faries, R.	Lights, incandescent, special features	June 26, 1894
521,435	Farmer, J. R.	Railway signals, sectional rail	June 12, 1894
520,673	Farrar, W. B.	Medical and surgical, electrodes	May 29, 1894
521,436	Fay, T. J.	Lighting, systems, automatic regulation	June 12, 1894
508,926	Federmann, P.	Lights, arc, special features	Nov. 21, 1893
513,460	Fee, H. L.	Magneto-electric	Jan. 23, 1894
506,774	Feldkamp, F. A.	do	Oct. 17, 1893
506,775	Feldkamp, F. A.	do	Oct. 17, 1893
506,311	Fessenden, R. A.	Conductors	Oct. 10, 1893
503,590	Field, S. D.	Telegraphy, reed	Aug. 22, 1893
507,728	Field, S. D.	Telephones, magnetic	Oct. 31, 1893
508,539	Field, S. D.	Railways, systems, overhead, trolleys	Nov. 14, 1893
507,449	Fils, H. P.	Motors, reciprocating	Oct. 24, 1893
501,777	Fisher, C. J.	Alarms, burglar	July 18, 1893
508,295	Fisher, H. W.	Conductors	Nov. 7, 1893
510,417	Fiske, B. A.	Indicators	Dec. 12, 1893
510,418	Fiske, B. A.	Distance instruments	Dec. 12, 1893
521,461	Fisk, H. M.	Telephones, switch-board	June 19, 1894
501,060	Fiske, J. P. B.	Magneto-electric	July 11, 1893
501,206	Fiske, J. P. B.	Cut-outs, mechanical, sliding	July 11, 1893
516,804	Fiske, J. P. B.	Transmission of power	Mar. 20, 1894
516,805	Fiske, J. P. B.	do	Mar. 20, 1894
518,236	Fiske, J. P. B.	Rheostats	Apr. 17, 1894
501,270	Fitzgerald, P. J.	Telegraphy, circuit closers	July 11, 1893
514,920	Fitzsimmons, P.	Telephones, multiple, electrode	Feb. 20, 1894

No.	NAME.	CLASS.	DATE.
504,676	Flagg, S. H.	Railways, systems, conduit	Sept. 5, 1893
502,398	Flanders, B. S.	Telephones, supports	Aug. 1, 1893
520,108	Fletcher, W. C.	Car brakes	May 22, 1894
505,097	Flint, B. F.	Lighting, systems	Sept. 19, 1893
505,098	Flint, B. F.	do	Sept. 19, 1893
518,944	Forbes, G.	Magneto-electric	May 1, 1894
518,945	Forbes, G.	do	May 1, 1894
518,946	Forbes, G.	Inducturiums, transformers, stationary	May 1, 1894
515,907	Forbus, G.	Railways, conductor supports and insulators	Mar. 6, 1894
515,205	Ford, B.	Lights, arc, gravity feed, clutch	Feb. 20, 1894
507,424	Ford, W. S. and Lenfest, A.	Telephones, switch-boards	Oct. 24, 1893
509,430	Fowden, R. A.	Telegraphy, printing, wheel	Nov. 28, 1893
513,910	Fraley, G. B.	Batteries, secondary	Jan. 30, 1894
517,450	Frame and Morden	Bells	Apr. 3, 1894
516,782	Francis, E. R.	Magneto-electric	Mar. 20, 1894
503,214	Frank, J. R.	Telegraphy, keys	Nov. 7, 1893
506,993	Franklin, H. H.	Railways, systems, conduit	Oct. 17, 1893
503,718	Frischen, J. H.	Railway signals, block system	Aug. 22, 1893
513,498	Frischen and Pfeil	Track instruments	Jan. 30, 1894
515,467	Fritsche, W.	Magneto-electric	Feb. 27, 1894
516,862	Frost, E. F.	Telephones, systems, multiple switch-board	Mar. 20, 1894
513,564	Fuller, A. W.	Insulators	Jan. 30, 1894
509,123	Fuller, J. T.	Railways, systems, overhead, trolleys	Nov. 21, 1893
522,051	Fuller, R.	Magneto-electric	June 26, 1894
513,387	Fuller, W. C.	Medical and surgical, body-wear	Jan. 23, 1894
519,283	Fyfe, J. C.	Lights, arc, positive feed, gear-clutch	May 1, 1894
522,052	Fyfe, J. C.	Magneto-electric	June 26, 1894
503,415	Gabarro, R.	Batteries, galvanic	Aug. 15, 1893
517,743	Gavey, W. S.	Railways, systems	Apr. 3, 1894
513,566	Gale, E.	Railways, systems, overhead, trolleys	Jan. 30, 1894
518,062	Gale, H. B.	Regulators	Apr. 10, 1894
505,422	Gardner, J. M.	Lights, sockets and keys	Sept. 19, 1893
509,573	Gardiner, J. M.	Telegraphy, fire, non-interfering	Nov. 28, 1893
519,945	Garey, W. E.	Galvanometers	May 15, 1894
513,775	Garl, M.	Annunciators, drop	Jan. 30, 1894
504,523	Gartside, C. W. and Wood, R. E.	Cut-outs, mechanical, oscillating snap	Sept. 5, 1893
514,593	Garver and Willyoung	Galvanometers	Feb. 13, 1894
509,616	Gates, E. B.	Railways, conductor supports and insulators	Nov. 28, 1893
511,941	Gay and Parsons	Railways, systems, overhead, trolleys	Jan. 2, 1894
509,216	Gaynor, T. F.	Telegraphy, fire, repeaters	Nov. 21, 1893
509,217	Gaynor, T. F.	Recorders	Nov. 21, 1893
509,218	Gaynor, T. F.	Telegraphy, fire, variable signal	Nov. 21, 1893
509,219	Gaynor, T. F.	Telegraphy, fire, non-interfering	Nov. 21, 1893
515,761	Gaynor, T. F.	Telegraphy, fire	Mar. 6, 1894
515,762	Gaynor, T. F.	Telegraphy, fire, variable signal	Mar. 6, 1894
511,419	Geise, H.	Railways, systems, overhead	Dec. 26, 1893
514,822	Gennert, E. F.	Lights, incandescent, special features	Feb. 13, 1894
516,433	Gentry, W. T.	Coin-controlled apparatus	Mar. 13, 1894
510,596	Germaum, J. G.	Motors	Dec. 12, 1893
508,215	Gerry, J. H.	Clocks, electric	Nov. 7, 1893
513,262	Gerry, J. H.	Time alarms	Jan. 23, 1894
516,806	Gibboney, J. W.	Railway signals, sectional rail	Mar. 20, 1894
520,776	Gibboney, J. W.	Telegraphy, lightning arresters	June 5, 1894
510,533	Gibbs, J. S.	Cut-outs, mechanical, rotary	Dec. 12, 1893
517,100	Gibbs, J. S.	do	Mar. 27, 1894
505,457	Gibbs, L. T.	Railways, conductor supports and insulators	Sept. 26, 1893
501,502	Gifford, A. T.	Lights, incandescent, special features	July 18, 1893
509,524	Gill, J. B.	Telegraphy, fire, variable signal, dial	Nov. 28, 1893
514,823	Gillette, W.	Telephones, systems	Feb. 13, 1894
518,209	Gilliland and Toppan	Phonographs, coin-controlled apparatus	Apr. 10, 1894
506,223	Gold, J. S.	Telephones, supports	Oct. 10, 1893
507,803	Goldkind and Stirn	Lighting, ceiling block	Oct. 31, 1893
518,782	Goodhand, J. E.	Railways, systems, closed conduit	Apr. 24, 1894
516,198	Goodhue, C. F.	Dampers, automatic, electric	Mar. 13, 1894
502,229	Goodman, E. W.	Connectors	July 25, 1893
518,142	Goodman and Goodman	Telephones, electric	Apr. 10, 1894
520,306	Goodman and Goodman	do	May 22, 1894
504,334	Goodridge, W. M.	Cut-outs, thermal	Sept. 5, 1893
504,345	Goodridge, W. M.	Telephones, systems	Sept. 5, 1893
517,547	Gordon, M. T.	Alarms, burglar	Apr. 3, 1894
503,104	Goreham, H. A.	Railways, systems, conduit	Nov. 7, 1893
517,692	Goreham, H. A.	do	Apr. 3, 1894
510,534	Gorges, J. H. T.	Motors	Dec. 12, 1893
501,565	Görldt, G.	Igniting apparatus	July 18, 1893
519,323	Graham and Allen	Railways, systems, conduit	May 8, 1894
517,520	Graham and Chapman	Igniting devices, manual	Apr. 3, 1894
514,221	Gray, L. B.	Railways, conductor supports and insulators	Feb. 6, 1894



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514,651	Graydon, A. J	Igniting devices, manual	Feb. 13, 1894
513,777	Green, A	Connectors	Jan. 30, 1894
507,493	Green, G. F	Railways, systems, conduit	Oct. 24, 1893
510,018	Green, H	Lights, incandescent	Dec. 5, 1893
516,596	Green, J. L	Track instruments	Mar. 13, 1894
516,597	Green, J. L	Railway signals, block	Mar. 13, 1894
516,598	Green, J. L	Track instruments	Mar. 13, 1894
517,858	Greenfield, E. T	Motors	Apr. 10, 1894
516,484	Greengard, M. D	Lights, sockets and keys	Mar. 13, 1894
507,708	Gregg, J. A. S	Batteries, galvanic	Oct. 31, 1893
503,595	Gregory, F. L	Meters	Aug. 22, 1893
511,946	Gregory, F. L	Clocks, electric	Jan. 2, 1894
513,181	Gröper, A	Telephones, multiple, electrode	Jan. 23, 1894
513,391	Gudgell, C	Meters	Jan. 23, 1894
514,849	Guillaume, T	Conductors	Feb. 13, 1894
514,925	Guillaume, T	do	Feb. 20, 1894
513,921	Gutierrez and Thompson	Lights, arc, non-feeding	Jan. 30, 1894
522,055	Hall, D. F	Telegraphy, circuit closers, thermal	June 26, 1894
504,980	Hall, C. K. and Lillard, W. B	Telegraphy, fire, automatic	Sept. 12, 1893
511,611	Hammond, C. N	Insulators	Dec. 26, 1893
511,612	Hammond, C. N	do	Dec. 26, 1893
511,613	Hammond, C. N	Lighting, ceiling block	Dec. 26, 1893
514,827	Hampton, R. I	Railways, systems, conduit	Feb. 13, 1894
512,612	Hanahan, H. W	Magneto-electric	Jan. 9, 1894
512,373	Hanford, M	Lighting, systems	Jan. 9, 1894
506,312	Harris, S	Railways, systems, overhead	Oct. 10, 1893
521,711	Harris, T	Railways, systems, closed conduit	June 19, 1894
509,530	Harrison, W. S	Telephones, switches	Nov. 28, 1893
11,395	Hart, G. W	Cut-outs, mechanical, rotary	Dec. 12, 1893
512,880	Hartley, C. J	Lights, arc, gravity feed, clutch	Jan. 16, 1894
501,653	Harvard, J	Telegraphy, fire	July 18, 1893
501,068	Haskins, C. D	Cut-outs, mechanical, oscillating snap	July 11, 1893
511,523	Haskins, C. D	Regulators	Dec. 26, 1893
515,487	Haskins, C. D	do	Mar. 13, 1894
518,244	Haskins, C. D	Meters	Apr. 17, 1894
502,399	Haskins, C. H	Measuring instruments, telemetry	Aug. 1, 1893
515,401	Hatch, A. S	Heaters	Feb. 27, 1894
515,827	Hatch, C. A	Alarms	Mar. 6, 1894
521,163	Hawkesworth, R. M	Railways, systems, overhead	June 12, 1894
514,460	Haywood, D. B	Conductors	Feb. 13, 1894
501,938	Hazelton, F. D	Lights, arc, special features	July 25, 1893
522,057	Heastings, E. F. A	Railways, systems, overhead, trolleys	June 26, 1894
503,371	Heil, A	Telegraphy, keys	Aug. 15, 1893
503,372	Heil, A	Telegraphy, Morse registers	Aug. 15, 1893
519,674	Heilman, J. J	Electric locomotives	May 8, 1894
517,042	Heimann, S	Lights, filaments and carbons	Mar. 27, 1894
517,105	Henderson, J. W	Motors	Mar. 27, 1894
511,017	Hendrix, W. W	Railways, systems, overhead	Dec. 19, 1893
511,018	Hendrix, W. W	Railways, systems, overhead, trolleys	Dec. 19, 1893
511,019	Hendrix, W. W	do	Dec. 19, 1893
520,848	Henry, A. J	Time check	June 5, 1894
517,455	Henry, G. B	Batteries, secondary	Apr. 3, 1894
501,009	Henry, J. C	Railways, systems, overhead	July 4, 1893
504,216	Henry, J. C	Regulators	Aug. 29, 1893
508,613	Henry, J. C	Conductors, underground	Nov. 14, 1893
508,614	Henry, J. C	Recorders, speed	Nov. 14, 1893
508,615	Henry, J. C	Railways, systems, overhead	Nov. 14, 1893
508,616	Henry, J. C	Lighting, systems	Nov. 14, 1893
509,311	Henry, J. C	Electric locomotives	Nov. 21, 1893
509,312	Henry, J. C	Railways, systems, closed conduit	Nov. 21, 1893
512,820	Henry, J. C	Inductoriums, rotary	Jan. 16, 1894
513,264	Henry, J. C	Meters	Jan. 23, 1894
516,807	Henry, J. C	Magneto-electric	Mar. 20, 1894
516,808	Henry, J. C	Railways, systems, overhead	Mar. 20, 1894
518,033	Henry, J. C	Motors	Apr. 10, 1894
519,115	Henry, J. C	Railways, systems, overhead	May 1, 1894
520,780	Henry, J. C	Electric locomotives	June 5, 1894
521,651	Henry, J. C	Motors	June 19, 1894
518,404	Henshaw, F. V	do	Apr. 17, 1894
519,116	Herdman, F. E	Motors, hand-operating devices	May 1, 1894
519,117	Herdman, F. E	Elevators	May 1, 1894
519,120	Herdman, F. E	Regulators	May 1, 1894
519,121	Herdman, F. E	Motors, hand-operating devices	May 1, 1894
519,122	Herdman, F. E	do	May 1, 1894
519,123	Herdman, F. E	do	May 1, 1894
519,124	Herdman, F. E	do	May 1, 1894
11,408	Herdman, F. E	Elevators	Mar. 27, 1894



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504,938	Herbert, N.	Electro-magnetic	Sept. 12, 1893
11,409	Herdman, F. E.	Elevators, safety device	Mar. 27, 1894
518,525	Hermann, E. A.	Railway signals, block	Apr. 17, 1894
521,328	Herr, J.	Connectors	June 12, 1894
504,160	Herrick, A. B.	Rheostats	Aug. 29, 1893
504,528	Herrick, A. B.	Cut-outs, mechanical, oscillating snap	Sept. 5, 1893
507,125	Herrick, A. B.	Railway signals, cab, sectional rail	Oct. 24, 1893
520,781	Herrick, A. B.	Magneto-electric	June 5, 1894
518,188	Hersh, Woodward and Pettee	Cut-outs, mechanical, rotary	Apr. 10, 1894
519,330	Hertel, C. W. A.	Batteries, galvanic	May 8, 1894
507,539	Heston, W.	Railways, systems, overhead, trolleys	Oct. 31, 1893
505,293	Hess, H. K.	Recorders, manual	Sept. 19, 1893
511,524	Hesse, G. E.	Railways, systems, converters	Dec. 26, 1893
514,461	Hey, G. W.	Telephones, calls, step-by-step	Feb. 13, 1894
514,462	Hey, G. W.	do	Feb. 13, 1894
520,427	Hey, G. W.	do	May 29, 1894
505,270	Hicks, O. H. and Troy, R. F.	Locks, electric	Sept. 19, 1893
505,271	Hicks, O. H. and Troy, R. F.	do	Sept. 19, 1893
518,756	Hicks, T. H.	Magneto-electric	Apr. 24, 1894
520,050	Hicks, T. H.	Systems of distribution	May 22, 1894
510,260	Higham, D.	Lighting, systems, automatic regulation	Dec. 5, 1893
515,473	Higham, D.	Regulators	Feb. 27, 1894
520,232	Higham, D.	Lighting, systems, automatic regulation	May 22, 1894
507,364	Hiler, G. P.	Lights, incandescent, special features	Oct. 24, 1893
508,314	Hill, C. C.	Lights, arc, special features	Nov. 7, 1893
518,513	Hill, W. S.	Cut-outs, mechanical	Apr. 24, 1894
511,240	Hinds, J. L.	Cut-outs, mechanical, oscillating snap	Dec. 19, 1893
511,889	Hinds, J. L.	Cut-outs, mechanical	Jan. 2, 1894
512,614	Hinds, J. L.	Cut-outs, mechanical, oscillating springs	Jan. 9, 1894
520,206	Hinkley, C. S. W.	Medical and surgical, electrode	May 22, 1894
520,782	Hinman, A.	Motors	June 5, 1894
509,620	Hitt, S. E.	Magneto-electric	Nov. 28, 1893
514,075	Hitt, S. E.	Galvanometers	Feb. 6, 1894
501,144	Hochhausen, W.	do	July 11, 1893
506,367	Hochhausen, W.	Elevators	Oct. 10, 1893
510,601	Hochhausen, W.	Motors, alternating	Dec. 12, 1893
516,631	Hochhausen, W.	Regulators	Mar. 20, 1894
502,670	Hofbauer, F. X.	Magneto-electric	Aug. 1, 1893
501,071	Höfer, C. F. W.	Cut-outs, mechanical, sliding	July 11, 1893
506,503	Hoffmann, C.	Lights, arc, gravity feed, gear-clutch	Oct. 10, 1893
509,662	Hoffmann, C.	Magneto-electric	Nov. 28, 1893
510,862	Hoffmann, C.	do	Dec. 12, 1893
518,719	Hoffmann, C.	Lights, arc, gravity feed, gear-clutch	Apr. 24, 1894
520,264	Hoffmann, C.	Magneto-electric	May 22, 1894
502,518	Hoffmann, C. H.	Cut-outs, electro-magnetic	Aug. 1, 1893
502,519	Hoffmann, C. H.	Cut-outs, mechanical	Aug. 1, 1893
514,714	Hoffmann and Brogan	Connectors	Feb. 13, 1894
520,429	Hoggson, S. H.	Batteries, galvanic	May 29, 1894
518,245	Holden, F.	Galvanometers	Apr. 17, 1894
510,508	Holman, S. W.	Telegraphy, circuits and systems	Dec. 12, 1893
507,322	Holmes, A. R.	Telegraphy, fire, automatic	Oct. 24, 1893
518,604	Hollerith, H.	Indicators	Apr. 24, 1894
518,835	Hollerith, H.	do	Apr. 24, 1894
518,836	Hollerith, H.	do	Apr. 24, 1894
511,049	Homel, A.	Lights, arc, gravity feed, clutch	Dec. 19, 1893
518,952	Hooper, G. W.	Railways, systems, overhead, trolleys	May 1, 1894
521,239	Hoopes, C. R.	Telegraphy, circuit closers	June 12, 1894
520,784	Hopkins and Stebbins	Motors, hand-operating devices	June 5, 1894
508,422	Hornberger, W. H.	Inductariums, transformers, stationary	Nov. 14, 1893
510,640	Hornberger, W. H.	do	Dec. 12, 1893
515,709	Houck and Browning	Telegraphy, transmitters	Feb. 27, 1894
512,823	Hough, A.	Batteries, secondary	Jan. 16, 1894
513,109	Hongh and Burns	Heaters	Jan. 23, 1894
503,538	Howard, L. E.	Lights, arc, special features	Aug. 15, 1893
503,539	Howard, L. E.	Lights, arc, special features	Aug. 15, 1893
512,250	Hoyt, A. H.	Galvanometers	Jan. 2, 1894
515,432	Hubbell, C. J.	Batteries, galvanic	Feb. 27, 1894
507,732	Huben, G. A.	Railways, systems, overhead	Oct. 31, 1893
507,733	Huben, G. A.	Railways, systems, overhead, trolleys	Oct. 31, 1893
511,953	Hunking, C. D.	Telegraphy, circuit closers	Jan. 2, 1894
500,657	Hunter, R. M.	Lights, arc, gravity feed, clutch	July 4, 1893
501,589	Hunter, R. M.	Galvanometers	July 18, 1893
502,077	Hunter, R. M.	do	July 25, 1893
502,297	Hunter, R. M.	Electric locomotives	Aug. 1, 1893
503,321	Hunter, R. M.	Systems of distribution	Aug. 15, 1893
503,602	Hunter, R. M.	Lamps and gas fittings, head lights	Aug. 22, 1893
504,271	Hunter, R. M.	Lights, arc, gravity feed, clutch	Aug. 29, 1893

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509,167	Hunter, R. M	Lights, arc, special features	Nov. 21, 1893
509,168	Hunter, R. M	Lights, arc, gravity feed, clutch	Nov. 21, 1893
510,540	Hunter, R. M	Telegraphy, circuit closers	Dec. 12, 1893
510,602	Hunter, R. M	Railways, systems	Dec. 12, 1893
511,081	Hunter, R. M	Telegraphy, automatic	Dec. 19, 1893
514,228	Hunter, R. M	Systems of distribution	Feb. 6, 1894
514,229	Hunter, R. M	Lights, arc, positive feed, gear-clutch	Feb. 6, 1894
514,932	Hunter, R. M	Railways, conductor supports and insulators	Feb. 20, 1894
517,162	Hunter, R. M	Galvanometers	Mar. 27, 1894
517,163	Hunter, R. M	do	Mar. 27, 1894
518,037	Hunter, R. M	Annunciators, step-by-step	Apr. 10, 1894
520,111	Hunter, R. M	Electric locomotives	May 22, 1894
520,359	Hunter, R. M	Metal working	May 22, 1894
520,360	Hunter, R. M	do	May 22, 1894
520,361	Hunter, R. M	Galvanometers	May 22, 1894
514,933	Hunting, F. S	Transmission of power	Feb. 20, 1894
502,040	Hussey, C. A	Rheostats	July 25, 1893
516,204	Ihlder, J. D	Regulators	Mar. 13, 1894
512,473	Irving, F. K	Lights, arc, non-feeding	Jan. 9, 1894
517,862	Isaacs, J. A	Medical and surgical, bath	Apr. 10, 1894
510,863	Jacques, W. W	Telephones, systems, multiple switch-board, test.	Dec. 12, 1893
518,367	Jacques, W. W	Telephones, systems	Apr. 17, 1894
513,112	Jandus, W	Lights, arc, gravity feed, clutch	Jan. 23, 1894
500,902	Jefferson, G. W	Magneto-electric	July 4, 1893
516,095	Jenkins, S. B	Heaters	Mar. 6, 1894
519,043	Jenkins, S. B	do	May 1, 1894
517,804	Jenkins, W. F	Railways, systems, conduit	Apr. 3, 1894
509,085	Jenne and Willey	Igniting devices, manual	Nov. 21, 1893
501,074	Jergle, J	Lights, arc, positive feed, gear-clutch	July 11, 1893
510,177	Jewell, E. W	Galvanometers	Dec. 5, 1893
512,970	Johanson, J. B	Electrolysis, aqueous bath	Jan. 16, 1894
510,603	Johnson, A. H	Railway signals, sectional rail	Dec. 12, 1893
520,926	Johnson, A. H	Railway signals	June 5, 1894
509,036	Johnson, E. H	Cut-outs, thermal	Nov. 21, 1893
509,622	Johnson, E. H	Railways, systems, conduit	Nov. 23, 1893
511,434	Johnson, H. T	Batteries, galvanic	Dec. 26, 1893
510,604	Johnson, L. F	do	Dec. 12, 1893
521,412	Johnson, L. F	Railway signals, sectional rail	June 12, 1894
521,798	Johnson, S. P	Lights, arc, gravity feed, gear-clutch	June 26, 1894
512,115	Jones, A. B	Regulators	Jan. 2, 1894
520,737	Jones, B. J	Railways, conductor supports and insulators	May 29, 1894
502,494	Jones, C. E	Heaters	Aug. 1, 1893
514,554	Jones, C. E	Cut-outs, thermal	Feb. 13, 1894
503,421	Jones, H. C	Railways, systems, overhead, trolleys	Aug. 15, 1893
502,098	Jones, R. M	Motors	July 25, 1893
508,322	Jones, W. N	Motors, hand-operating devices	Nov. 7, 1893
509,381	Jordan, L. F	Batteries, galvanic	Nov. 28, 1893
521,168	Jungner, E. W	Batteries, thermal	June 12, 1894
510,142	Just, P. C	Railways, systems, conduit	Dec. 5, 1893
513,364	Kahn, L	Recorders	Jan. 23, 1894
508,946	Karr and Bradrick	Railway signals, cab, sectional rail	Nov. 21, 1893
517,866	Keith, N. S	Regulators	Apr. 10, 1894
512,711	Keithly, H. K	Connectors	Jan. 16, 1894
517,549	Keithly, W. C	Railways, systems, conduit	Apr. 3, 1894
518,190	Keller, A. K	Phonographs, coin-controlled apparatus	Apr. 10, 1894
518,191	Keller, A. K	do	Apr. 10, 1894
518,192	Keller, A. K	do	Apr. 10, 1894
519,715	Keller, E. E	Motors, hand-operating devices	May 15, 1894
506,881	Keller, J	Regulators	Oct. 17, 1893
503,604	Kellogg, M. G	Conductors	Aug. 22, 1893
502,300	Kells, C. E., jr	Cut-outs, mechanical	Aug. 1, 1893
515,962	Kelly, J. F	Motors, alternating	Mar. 6, 1894
518,739	Kelly, J. F	do	Apr. 24, 1894
513,112	Kelly, W. J	Lights, incandescent, special features	Jan. 23, 1894
513,113	Kelly, W. J	do	Jan. 23, 1894
507,658	Kelly and Chesney	Motors, alternating	Oct. 31, 1893
518,788	Kelly and Chesney	do	Apr. 24, 1894
507,139	Kennedy, C. W	Batteries, secondary	Oct. 24, 1893
519,188	Kersberg, R	Magneto-electric	May 1, 1894
510,605	Kester, J. F	Lights, arc, gravity feed, gear-clutch	Dec. 12, 1893
514,150	Kester, J. F	Magneto-electric	Feb. 6, 1894
519,912	Kester, J. T	Lights, arc, gravity feed, clutch	May 15, 1894
506,700	Kiehe, J. S	Telegraphy, fire, alarms and extinguishers	Oct. 17, 1893
501,723	King, F	Batteries, secondary	July 18, 1893
516,374	Kiug, F. L	Railways, systems, closed conduit	Mar. 13, 1894
516,740	King, G. R	Medical and surgical, body-wear	Mar. 20, 1894



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520,786	Kinisiburgh, C. W.	Telephones, details	June 5, 1894
510,480	Kirke, W. R.	Telegraphy, circuits and systems	Dec. 12, 1893
501,080	Kirkegaard, G.	Lights, arc, positive feed, gear-clutch	July 11, 1893
501,081	Kirkegaard, G.	do	July 11, 1893
515,342	Kirkegaard, G.	Lights, arc, gravity feed	Feb. 27, 1894
509,171	Kirnan, W. H.	Recorders	Nov. 21, 1893
518,722	Kirnan, W. H.	Telegraphy, fire, non-interfering	Apr. 24, 1894
520,234	Kirnan, W. H.	Annunciators, step-by-step	May 22, 1894
504,022	Kinsman, F. E.	Railway signals, cab, sectional rail	Aug. 29, 1893
505,833	Kinsman, F. E.	Railway signals, sectional rail	Oct. 3, 1893
505,834	Kinsman, F. E.	Telegraphy, circuit closers, thermal	Oct. 3, 1893
506,223	Kinsman, F. E.	Lighting, systems, car	Oct. 10, 1893
520,061	Kinsman, F. E.	Railway signals, cab, sectional rail	May 22, 1894
520,062	Kinsman, F. E.	Railway signals, sectional rail	May 22, 1894
511,627	Kintner, C. J.	Railways, systems, closed conduit	Dec. 26, 1893
512,444	Kintner, C. J.	do	Jan. 9, 1894
11,354	Kintzing, R. C.	(Reis.) Magneto-electric	July 25, 1893
505,467	Kitsee, I.	Batteries, secondary	Sept. 26, 1893
521,170	Kleber, O. L.	Telegraphy, printing, wheel	June 12, 1894
501,884	Klees, W. H.	Lights, arc, gravity feed, gear-clutch	July 18, 1893
509,539	Klein, C. J.	Telegraphy, circuit closers	Nov. 28, 1893
515,087	Kleinstauben and Kleinstauben	Conductors, underground	Feb. 20, 1894
515,589	Kleinstauben and Kleinstauben	Alarms	Feb. 27, 1894
519,634	Kloss, E.	Telegraphy, circuit closers, thermal	May 8, 1894
516,492	Knapp, C.	Railways, systems, overhead, trolleys	Mar. 13, 1894
520,318	Knap, E. D.	Lights, incandescent, special features	May 22, 1894
507,547	Knight, A. P.	Motors, hand-operating devices	Oct. 31, 1893
508,622	Knight, W. H.	Railways, systems, overhead	Nov. 14, 1893
509,475	Knight, W. H.	Regulators	Nov. 28, 1893
516,318	Knight, W. H.	do	Mar. 20, 1894
518,254	Knight, W. H.	Motors, hand-operating devices	Apr. 17, 1894
520,787	Knight, W. H.	Electric locomotives	June 5, 1894
508,623	Knowles, E. R.	Lights, arc, special features	Nov. 14, 1893
505,624	Knowles, E. R.	Magneto-electric	Nov. 14, 1893
508,626	Knowles, E. R.	Lighting, systems, hand regulation	Nov. 14, 1893
516,819	Knowles, E. R.	Lights, sockets and keys	Mar. 20, 1894
516,820	Knowles, E. R.	do	Mar. 20, 1894
516,821	Knowles, E. R.	Lamps and gas fittings, head lights	Mar. 20, 1894
516,822	Knowles, E. R.	Lights, arc, gravity feed, gear-clutch	Mar. 20, 1894
516,824	Knowles, E. R.	Lights, incandescent, special features	Mar. 20, 1894
516,826	Knowles, E. R.	Lights, arc, special features	Mar. 20, 1894
520,789	Knowles, E. R.	Galvanometers	June 5, 1894
520,852	Knowles, E. R.	Cut-outs, mechanical, sliding	June 5, 1894
520,963	Knowles, E. R.	Galvanometers	June 5, 1894
520,964	Knowles, E. R.	do	June 5, 1894
508,625	Knowles and Park	Lighting, systems	Nov. 14, 1893
516,825	Knowles and Park	Lights, arc, positive feed, gear-clutch	Mar. 20, 1894
520,788	Knowles and Park	Lights, arc, special features	June 5, 1894
516,823	Knowles and Robinson	Galvanometers	Mar. 20, 1894
503,427	Kohl, A.	Connectors	Aug. 15, 1893
518,959	Kolbassieff, E. V.	Telephones, magnetic	May 1, 1894
505,247	Kosinski, W. T.	Magneto-electric	Sept. 19, 1893
507,660	Krastin, A.	Telegraphy, circuit closers	Oct. 31, 1893
507,916	La Boiteaux, F. M.	Magnetizing	Oct. 31, 1893
506,650	Lacombe, J. M.	Lights, filaments and carbons	Oct. 10, 1893
513,401	Lamme, B. G.	Electric locomotives	Jan. 23, 1894
519,862	Lamme, B. G.	Motors, alternating	May 15, 1894
520,965	Lamme, B. G.	Systems of distribution	June 5, 1894
504,177	Landherr, F. H.	Magneto-electric	Aug. 29, 1893
506,516	Lane, L.	Medical and surgical, electrodes	Oct. 10, 1893
520,365	Lane and Perrin	Annunciators, drop	May 22, 1894
518,693	Lange and Lamme	Motors, hand-operating devices	Apr. 24, 1894
516,892	Langhans, R.	Lights, incandescent	Mar. 20, 1894
501,085	Larned, S. J. and Pickernell, F. A.	Telephones, systems, divided central	July 11, 1893
501,086	Larned, S. J. and Pickernell, F. A.	do	July 11, 1893
516,653	Lary, L. F.	Batteries, galvanic	Mar. 20, 1894
502,626	Lattig, J. W.	Railway signals, sectional rail	Aug. 1, 1893
502,627	Lattig, J. W.	Track instruments	Aug. 1, 1893
503,487	Laurence, W.	Railways, systems, closed conduit	Aug. 15, 1893
505,204	Laurence, W.	Railways, systems, overhead, trolleys	Sept. 19, 1893
516,631	Laurence, W.	Railways, systems, closed conduit	Mar. 13, 1894
518,006	Laurence, W.	Electric locomotives	Apr. 10, 1894
520,758	Laurence, W.	Railways, systems, overhead, trolleys	May 29, 1894
519,334	Lavens, E.	Lights, arc, special features	May 8, 1894
518,613	Lecellier, L. R.	Telegraphy, circuit closers	Apr. 24, 1894
503,349	Lee, C. T.	Lights, sockets and keys	Aug. 15, 1893
511,853	Lee, C. T.	Railways, conductor supports and insulators	Jan. 2, 1894



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521,799	Lee, J	Motors	June 26, 1894
521,800	Leech, G. A	Medical and surgical	June 26, 1894
514,561	Leffler, P. W	Railways, systems	Feb. 13, 1894
514,718	Leffler, P. W	do	Feb. 13, 1894
514,267	Legay and Legay	Batteries, secondary	Feb. 6, 1894
504,496	Lemp, H	Metal working	Sept. 5, 1893
504,497	Lemp, H	Regulators	Sept. 5, 1893
514,480	Lemp, H	Cut-outs, thermal	Feb. 13, 1894
519,335	Lemp, H	Regulators, alternating	May 8, 1894
515,778	Lemp and Moody	Metal working	Mar. 6, 1894
516,312	Lemp and Moody	do	Mar. 13, 1894
517,120	Lemp and Wightman	Cut-outs, thermal	Mar. 27, 1894
507,518	Leonard, M. B	Railway signals, block system	Oct. 24, 1893
517,419	Leonard, M. B	Railway signals	Mar. 27, 1894
518,786	Le Suren, E. A	Electrolysis, aqueous bath apparatus	Apr. 24, 1894
513,796	Lewers, H.	Telegraphy, circuit closers	Jan. 30, 1894
516,212	Lewis, A. D	Printing, stencil-making pens	Mar. 13, 1894
506,124	Lewis, H. A	Railways, systems	Oct. 3, 1893
504,631	Lewis, I. N	Lighting, systems, car	Sept. 5, 1893
516,495	Lewis, I. N	do	Mar. 13, 1894
516,496	Lewis, I. N	do	Mar. 13, 1894
516,497	Lewis, I. N	Regulators	Mar. 13, 1894
516,498	Lewis, I. N	Batteries, secondary	Mar. 13, 1894
520,323	Lewis, W. F	Railway signals, block systems	May 22, 1894
504,130	Libbey, H. W	Batteries, galvanic	Aug. 29, 1893
506,786	Libbey, H. W	Electric locomotives	Oct. 17, 1893
516,827	Lieb, C. A	Magneto-electric	Mar. 20, 1894
520,855	Lieb, C. A	Insulators	June 5, 1894
500,918	Linton, G. E	Cut-outs, thermal	July 4, 1893
509,578	Lintner, G. A	Galvanometers	Nov. 28, 1893
504,734	Linville, S. R. and Hettmansperger, L. F	Telegraphy, printing, multiple wheel	Sept. 12, 1893
515,779	Lipscomb, H. H	Railways, conductor supports and insulators	Mar. 6, 1894
512,656	Locke, F. M	Telegraphy, relays and sounders	Jan. 9, 1894
520,367	Locke, F. M	Insulators	May 22, 1894
512,253	Lockwood, W. C	Batteries, secondary	Jan. 2, 1894
518,742	Lockwood, W. C	Telephones, electric	Apr. 24, 1894
501,087	Lockwood, T. D. and Larned, S. J	Telephones, systems, divided central	July 11, 1893
516,161	Loe, T. C	Conductors, underground	Mar. 6, 1894
501,842	Long, M. W	Motors	July 18, 1893
501,519	Lorrain, J. G	Telegraphy, fire, alarms and extinguishers	July 18, 1893
510,074	Louis, O. F	Galvanometers	Dec. 5, 1893
511,342	Love, J. C	Railways, systems, overhead	Dec. 26, 1893
511,343	Love, J. C	do	Dec. 26, 1893
511,344	Love, J. C	Railways, conductor supports and insulators	Dec. 26, 1893
511,345	Love, J. C	do	Dec. 26, 1893
511,346	Love, J. C	Railways, systems, conduit	Dec. 26, 1893
507,916	Luce, W. B	Lights, arc, gravity feed, gear-clutch	Oct. 31, 1893
502,734	Ludlow, S. W	Telegraphy, circuit closers, thermal	Aug. 8, 1893
505,665	Lundell, R	Magneto-electric	Sept. 26, 1893
507,144	Lundell, R	Motors, hand-operating devices	Oct. 24, 1893
516,213	Lundell, R	Motors, alternating	Mar. 13, 1894
522,067	Lundell, R. L	Electric locomotives	June 26, 1894
512,888	Luscomb, H. H	Railways, conductor supports and insulators	Jan. 16, 1894
520,602	Luscomb, H. H	Insulators	May 29, 1894
520,794	Lutz, W. D	Elevators	June 5, 1894
502,405	Lyon, E. H	Batteries, galvanic	Aug. 1, 1893
515,241	Lyon, J. B	Rheostats	Feb. 20, 1894
507,374	Lyte, F. M	Electrolysis, aqueous bath, chemicals	Oct. 24, 1893
503,429	Lyte, F. M. and C. H. M	Electrolysis, fused bath	Aug. 15, 1893
517,957	MacCoy, A. T	Cut-outs, mechanical, sliding	Apr. 10, 1894
513,023	Mackenzie, G. W	Railways, systems, overhead, trolleys	Jan. 16, 1894
507,147	Mackie, R	Telephones, calls, step-by-step	Oct. 24, 1893
507,148	Mackie, R	do	Oct. 24, 1893
517,582	Mackie, R	Motors, hand-operating devices	Apr. 3, 1894
504,734	Maddox, J. P	Railways, systems, overhead, trolleys	Sept. 12, 1893
506,920	Mailloux, C. O. and Barston, W. S	Lighting, systems, hand regulation	Oct. 17, 1893
506,921	Mailloux, C. O. and Barston, W. S	do	Oct. 17, 1893
521,936	Marks, L. B	Lights, arc, special features	June 26, 1894
520,996	Marks and Ransom	Lights, arc, gravity feed, gear-clutch	June 5, 1894
504,738	Marshall, N	Safety devices, manual	Sept. 12, 1893
505,628	Marshall, W	Telephones, systems	Sept. 26, 1893
504,397	Marsh, J. W	Conductors	Sept. 5, 1893
504,398	Marsh, J. W	do	Sept. 5, 1893
507,714	Marten, A. S	Lamp and gas fittings, shade supports	Oct. 31, 1893
516,500	Martin, M	Bells	Mar. 13, 1894
511,347	Marty, J	Regulators	Dec. 26, 1893
519,794	Masou, D	Railways, systems, closed conduit	May 15, 1894

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507,715	Mason, J. H.	Telephones electric	Oct. 31, 1893
519,726	Mathiesen, W.	Lights, arc, gravity feed, clutch	May 15, 1894
503,867	Matson, L. B.	Cut-outs, mechanical	Aug. 22, 1893
511,634	Mauldin, J. L.	Railways, systems, overhead	Dec. 26, 1893
522,022	Maxim, H. F.	Telegraphy, circuit closers, thermal	June 26, 1894
509,477	May, E. S. C.	Telephones, systems, multiple switch-board, divided central.	Nov. 28, 1893
510,646	Mayhew, C. L.	Cut-outs, electro-magnetic	Dec. 12, 1893
518,695	Maynard, C. A.	Railways, systems, conduit	Apr. 24, 1894
515,882	Maynadier, J. E.	Magneto-electric	Mar. 6, 1894
508,482	Mayr, G.	Lights, incandescent, special features	Nov. 14, 1893
521,721	Mayr, G.	do	June 19, 1894
509,932	McBerty, F. R.	Telephones, systems, multiple switch-board, test.	Dec. 5, 1893
512,386	McBerty, F. R.	Electro-magnets	Jan. 9, 1894
512,050	McBrien, F.	Railway signals, sectional rail	Jan. 2, 1894
512,051	McBrien, F.	do	Jan. 2, 1894
518,198	McCanny and Root	Lights, incandescent, special features	Apr. 10, 1894
501,021	McCarthy, L.	Lights, incandescent	July 4, 1893
502,677	McCarthy, L.	Railways, conductor supports and insulators	Aug. 1, 1893
502,826	McCarthy, L.	Cut-outs, mechanical	Aug. 8, 1893
503,549	McCarthy, L.	Insulators	Aug. 15, 1893
503,749	McCarthy, L.	Railways, conductor supports and insulators	Aug. 22, 1893
505,841	McCarthy, L.	Railways, systems, closed conduit	Oct. 3, 1893
513,950	McCarthy, L.	Railways, conductor supports and insulators	Jan. 30, 1894
517,621	McCarthy, L.	do	Apr. 3, 1894
518,071	McCarthy, L.	do	Apr. 10, 1894
518,373	McCarthy, L.	do	Apr. 17, 1894
520,606	McCarthy, L.	do	May 29, 1894
520,937	McCarthy, L.	do	June 5, 1894
516,708	McCordy, C. A.	Telegraphy, circuit closers, thermal	Mar. 20, 1894
502,007	McCornish, A. L.	Lighting, systems	July 25, 1893
511,448	McCornish, J. G.	Electric locomotives	Dec. 26, 1893
516,506	McCoubray, T.	Telephones, systems, house	Mar. 13, 1894
519,338	McElroy, J. F.	Cut-outs, mechanical	May 8, 1894
502,083	McEvoy, E. J.	Conductors	July 25, 1893
514,018	McEvoy, E. J.	Lighting, ceiling block	Feb. 6, 1894
514,019	McEvoy, E. J.	Alarms, burglar	Feb. 6, 1894
502,983	McEvoy, J. H.	Lights, arc, positive feed, gear-clutch	Aug. 8, 1893
507,559	McEvoy, J. H.	Car brakes	Oct. 31, 1893
513,592	McEvoy, J. H.	Annunciators, drop	Jan. 30, 1894
513,593	McEvoy, J. H.	Bells	Jan. 30, 1894
513,951	McFarlane and Edgar	Lights, sockets and keys	Jan. 30, 1894
516,574	McGahan, F. L.	Lights, arc, positive feed, gear-clutch	Mar. 13, 1894
509,443	McGiffert, J. B.	Lighting, systems, hand regulation	Nov. 28, 1893
509,545	McIntosh, G. M.	Bells	Nov. 28, 1893
503,213	McKay, H. S.	Motors	Aug. 15, 1893
519,869	McKay, H. S.	Motors, reciprocating	May 15, 1894
519,870	McKay, H. S.	do	May 15, 1894
520,072	McKee, A. G.	Motors, hand-operating devices	May 22, 1894
517,762	McKelvey, S. D.	Telephones, supports	Apr. 3, 1894
517,763	McKelvey, S. D.	Telephones, magnetic	Apr. 3, 1894
517,764	McKelvey, S. D.	do	Apr. 3, 1894
512,201	Mackenzie, G. W.	Railways, systems, overhead	Jan. 2, 1894
519,045	McKeown, J. B.	Lights, arc, gravity feed, clutch	May 1, 1894
521,808	McLaughlin, J. F.	Telegraphy, circuit closers	June 26, 1894
521,809	McLaughlin, J. F.	Lights, sockets and keys	June 26, 1894
517,009	McLean, A.	Lights, incandescent, special features	Mar. 20, 1894
504,815	McManus, R.	Lights, filaments and carbons	Sept. 12, 1893
504,845	McManus, R.	do	Sept. 12, 1893
511,739	McNalley, J. J.	Telephones, calls, step-by-step	Dec. 26, 1893
505,605	McNear, G. W.	Railways, systems, closed conduit	Sept. 26, 1893
503,157	McNeil, W. and Tinder, J. H.	Lighting, systems	Aug. 15, 1893
506,716	McNellies, C.	Lights, arc, gravity feed, clutch	Oct. 17, 1893
516,217	McNulta, H.	Rheostats	Mar. 13, 1894
502,466	McQuarrie, J. L.	Telephones, systems, multiple switch-board, divided central.	Aug. 1, 1893
522,180	McTighe, T. J.	Railways, conductor supports and insulators	June 26, 1894
511,244	Medina, F. B.	Telegraphy, relays and sounders	Dec. 19, 1893
502,465	Mehren, J. F.	Cut-outs, thermal	Aug. 1, 1893
518,788	Mehren, J. F.	Telegraphy, circuits and systems	Apr. 24, 1894
513,587	Meissner, W. O.	Bells	Jan. 30, 1894
515,125	Meissner, W. O.	Lights, arc, positive feed, clutch	Feb. 20, 1894
513,126	Meredith, W.	Rheostats	Jan. 23, 1894
515,965	Merritt, A. A.	Knitting and netting, stopping	Mar. 6, 1894
501,481	Meston, A. W.	Railways, conductor supports and insulators	July 11, 1893
511,245	Meston, M.	Batteries, thermal	Dec. 19, 1893



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515,478	Meyer, J	Connectors	Feb. 27, 1894
518,414	Meyer, J	do	Apr. 17, 1894
510,647	Michieli, J. P	Railways, systems, conduit	Dec. 12, 1893
521,269	Michl, W. R	Electro-magnets	June 12, 1894
518,263	Milde, C	Telephones, granular	Apr. 17, 1894
521,594	Miles, E. M	Medical and surgical, body-wear	June 19, 1894
503,799	Millard, W. W	Lights, arc, special features	Aug. 22, 1893
507,918	Miller, G. E	Railway signals, cab, sectional rail	Oct. 31, 1893
507,150	Miller, L. W	Cut-outs, mechanical	Oct. 24, 1893
520,267	Miller, W. H	Regulators	May 22, 1894
518,673	Milligan, T. P	Railways, systems	Apr. 24, 1894
508,551	Mills, W	Batteries, galvanic	Nov. 14, 1893
516,336	Miner, W. M	Lighting, systems, car	Mar. 13, 1894
520,445	Misell, D	Igniting devices	May 29, 1894
520,446	Misell, D	Clocks, electric	May 29, 1894
518,265	Mix, E. W	Meters	Apr. 17, 1894
516,829	Moody, W. S	Inductoriums, transformers, stationary	Mar. 20, 1894
502,629	Moore, G	Railways, systems, overhead, trolleys	Aug. 1, 1893
516,831	Moore, J. W	Motors, hand-operating devices	Mar. 20, 1894
502,444	Moore, McF. D	Regulators	Aug. 1, 1893
507,629	Morgan, E. C	Motors, reciprocating	Oct. 31, 1893
501,524	Morgan, W. G	Lights, incandescent, special features	July 18, 1893
509,322	Morgan, W. H	Motors, hand-operating devices	Nov. 21, 1893
512,514	Morrison, W	Batteries, secondary	Jan. 9, 1894
504,401	Morrow, J. T	Magneto-electric	Sept. 5, 1893
502,824	Morse, L	Batteries, secondary	Aug. 8, 1893
502,825	Morse, L	do	Aug. 8, 1893
511,787	Moss, H. E	Telegraphy, keys	Jan. 2, 1894
509,750	Mottram, W. T. M	Meters	Nov. 28, 1893
504,738	Mount, F. W	Lighting, systems, hand regulators	Sept. 12, 1893
517,166	Mowry, L. G	Railways, systems, overhead, trolleys	Mar. 27, 1894
520,329	Muir, R	Railways, systems, overhead	May 22, 1894
500,668	Mugnier, J. C. G	Railway signals, block system	July 4, 1893
518,349	Müller, C. L. F	Regulators	Apr. 17, 1894
516,379	Müller, H	Batteries, secondary	Mar. 13, 1894
504,276	Nelson, J	Railways, conductor supports and insulators	Aug. 29, 1893
505,170	Ness, T. W	Telephones, switches	Sept. 19, 1893
501,292	Newman, W. J	Bells	July 11, 1893
521,124	Nichols and Lincoln	Railways, conductor supports and insulators	June 5, 1894
501,529	Nickerson, W. E. and Cary, E. E	Lights, incandescent	July 18, 1893
501,530	Nickerson, W. E	do	July 18, 1893
501,531	Nickerson, W. E	do	July 18, 1893
500,670	Nickerson, W. E. and Cary, E. E	do	July 4, 1893
500,671	Nickerson, W. E	do	July 4, 1893
503,770	Nickerson, W. E	do	Aug. 22, 1893
507,554	Nickerson, W. E	do	Oct. 31, 1893
507,555	Nickerson, W. E	do	Oct. 31, 1893
507,556	Nickerson, W. E	do	Oct. 31, 1893
507,557	Nickerson, W. E	do	Oct. 31, 1893
507,558	Nickerson, W. E	do	Oct. 31, 1893
512,481	Niewerth, R	Lights, arc, non-feeding	Jan. 9, 1894
512,482	Niewerth, R	do	Jan. 9, 1894
501,094	Nordmann, P	Systems of distribution	July 11, 1893
501,095	Nordmann, P	Lighting, systems, automatic regulation	July 11, 1893
509,603	Noll, A	Conductors	Nov. 28, 1893
520,120	Northrup, E. F	Batteries, galvanic	May 22, 1894
515,606	Nourse, R. C	Lights, sockets and keys	Feb. 27, 1894
515,693	Nutting, S. E	Heaters, electric	Feb. 27, 1894
509,445	Nowotny, J. S	Inductoriums, induction coils	Nov. 28, 1893
500,937	Noyes, G. E	Railways, systems, conduit	July 4, 1893
514,128	Noyes and Winterhalden	Telegraphy, fire, variable signal, dial	Feb. 6, 1894
509,484	O'Connell, J. J	Telephones, switches	Nov. 28, 1893
515,531	O'Connell, J. J	Telephones, systems, multiple switch-board, divided central	Feb. 27, 1894
502,749	Oehring, A. J	Telegraphy, circuit closers, thermal	Aug. 8, 1893
511,451	Oehring, A. J	Bells	Dec. 26, 1893
500,601	Offrell, O	Cut-outs, thermal	July 4, 1893
501,191	Offrell, O	Cut-outs, mechanical	July 11, 1893
501,532	Offrell, O	Regulators	July 18, 1893
508,629	Offrell, O	Lighting, ceiling block	Nov. 14, 1893
520,800	Offrell, O	Motors	June 5, 1894
521,666	Offrell, O	Regulators, alternating	June 19, 1894
518,534	Olan, J. W. Th	Meters	Apr. 17, 1894
504,847	Oler, H. D	Railways, systems, conduit	Sept. 12, 1893
516,447	Olevette, C	Magneto-electric	Mar. 13, 1894
516,508	Omeara, J	Heaters, stoves and furnaces	Mar. 13, 1894
503,912	O'Neill, J. A	Lights, incandescent	Aug. 22, 1893



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505,123	O'Neill, J. J.	Insulators	Sept. 19, 1893
513,052	Ongley, C. E.	Lights, arc, special features	Jan. 16, 1894
506,066	Opperman, J.	Galvanometers	Oct. 3, 1893
503,981	Orme, J.	Railway signals, cab, sectional rail	Aug. 29, 1893
514,960	Orpen, W. H., jr.	Bells	Feb. 20, 1894
513,526	O'Sullivan, M. J.	Telegraphy, fire	Jan. 30, 1894
514,566	O'Sullivan, M. J.	Railway signals, sectional rail	Feb. 13, 1894
513,134	Otis, N. P.	Elevators	Jan. 23, 1894
511,157	Packard, W. D.	Motors, hand-operating devices	Dec. 19, 1893
501,533	Page, A. D.	Advertising, signs	July 18, 1893
513,720	Page, H. S.	Telephones, electric	Jan. 30, 1894
522,083	Paget, L.	Magneto-electric	June 26, 1894
513,245	Paget and Paget	Batteries, secondary	Jan. 23, 1894
502,889	Palmer, F. S.	Telegraphy, fire, automatic	Aug. 8, 1893
504,113	Palmros, A.	Railways, systems, overhead	Aug. 29, 1893
501,432	Parker, H. L. and Meston, A. W.	Motors	July 11, 1893
510,929	Parker and Summers	Telegraphy, automatic	Dec. 19, 1893
516,552	Parker and Summers	do	Mar. 13, 1894
504,454	Parks, W.	Telephones, electric	Sept. 5, 1893
509,244	Parrish, H. A.	Railway signals, sectional rail	Nov. 21, 1893
502,988	Parshall, H. F.	Magneto-electric	Aug. 8, 1893
508,486	Parshall, H. F.	Regulators	Nov. 28, 1893
520,378	Parson, E. A.	Cut-outs, thermal	May 22, 1894
504,740	Patee, T. A.	Friction generators	Sept. 12, 1893
509,093	Patenall, T. H.	Railway signals	Nov. 21, 1893
502,262	Patterson, W. R.	Telephones, systems	July 25, 1893
504,741	Patterson, W. R.	Recorders	Sept. 12, 1893
507,925	Patty, T. S.	Bells	Oct. 31, 1893
502,377	Paugh, S.	Magneto-electric	Aug. 1, 1893
503,334	Pawolonski, J.	Insulators	Aug. 13, 1893
500,604	Payne, C. Q.	Mills, magnetic separators	July 4, 1893
500,605	Payne, C. Q.	do	July 4, 1893
500,606	Payne, C. Q.	do	July 4, 1893
502,753	Payne, W. H.	Medical and surgical, body-wear	Aug. 8, 1893
512,055	Pearsons, J. J.	Batteries, galvanic	Jan. 2, 1894
521,322	Peck, L. R.	Lights, sockets and keys	June 12, 1894
515,716	Peebles, G.	Lights, incandescent, special features	Feb. 27, 1894
512,320	Peil and McFadden	Lights, incandescent	Jan. 9, 1894
502,315	Peirce, E. E.	Indicators	Aug. 1, 1893
509,447	Pellat, J. S. H.	Railway signals	Nov. 28, 1893
516,337	Pendleton, J. M.	Metal molds, soft metal machines	Mar. 13, 1894
510,188	Pennock, G. B.	Lighting, systems	Dec. 5, 1893
504,743	Perkins, C. G.	Lights, sockets and keys	Sept. 12, 1893
509,821	Perkins, F. B.	Elevators	Nov. 28, 1893
510,932	Perret, T. A.	Motors, hand-operating devices	Dec. 19, 1893
500,943	Perrin, F. S.	Railways, systems, conduit	July 4, 1893
506,883	Perrin, F. S.	Annunciators, drop	Oct. 17, 1893
509,095	Perry, J.	Meters	Nov. 21, 1893
511,791	Perry and Holland	Galvanometers	Jan. 2, 1894
516,876	Petersen, H. A. F.	Railways, systems, closed conduit	Mar. 20, 1894
518,894	Pettersen, O. A.	Medical and surgical, body-wear	Apr. 24, 1894
510,484	Pfouts, L. S.	Dental instruments	Dec. 12, 1893
510,485	Pfouts, L. S.	Railways, conductor supports and insulators	Dec. 12, 1893
501,578	Pfanne, H.	Electrolysis, aqueous bath, chemical	July 18, 1893
512,448	Pfarr, T. L.	Lights, sockets and keys	Jan. 9, 1894
505,207	Philbrich, O. P.	Regulators	Sept. 19, 1893
521,125	Phillips, J. J. E.	Conductors, underground	June 5, 1894
504,277	Phillips, W. A.	Lights, arc, gravity feed, gear-clutch	Aug. 29, 1893
518,966	Phillips and Entz	Batteries, secondary	May 1, 1894
511,358	Pickering, B.	Telephones, magnetic	Dec. 26, 1893
501,102	Pickernell, F. A.	Telephones, systems	July 11, 1893
503,252	Pickernell, F. A.	Telephones, systems, multiple switch-board, divided central.	Aug. 15, 1893
506,884	Pickernell, F. A.	Telegraphy, anti-induction devices	Oct. 17, 1893
511,276	Pickernell, F. A.	Telephones, systems, multiple switch-board	Dec. 19, 1893
512,214	Pickernell, F. A.	Telegraphy, circuits and systems	Jan. 2, 1894
510,048	Piepes, O. H.	Dental instruments	Dec. 5, 1893
504,745	Piggins, C. R.	Telegraphy, circuit closers	Sept. 12, 1893
520,933	Plodeck, P., sr.	Railways, systems, closed conduit	June 5, 1894
502,103	Polenoff, K.	Music, electric actions	July 25, 1893
515,939	Pope, E.	Telephones, systems, multiple switch-board, test.	Mar. 6, 1894
515,940	Pope, E.	do	Mar. 6, 1894
521,550	Pope, E.	Telegraphy, printing	June 19, 1894
511,159	Poppowitsch, E.	Batteries, galvanic	Dec. 19, 1893
514,241	Potter, A. J.	Magneto-electric	Feb. 6, 1894
501,433	Potter, E. C.	Railway signals, block	July 11, 1893

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508,632	Potter, W. B	Telegraphy, lightning arresters	Nov. 14, 1893
509,397	Pratt, C. R	Elevators	Nov. 28, 1893
502,381	Prentiss, H. S	Clocks, electric	Aug. 1, 1893
517,480	Prentiss, H. S	do	Apr. 3, 1894
514,030	Pretchard, F. E	Regulators	Feb. 6, 1894
508,633	Priest, E. D	Motors	Nov. 14, 1893
508,634	Priest, E. D	Magneto-electric	Nov. 14, 1893
516,834	Priest, E. D	Motors, hand-operating devices	Mar. 20, 1894
503,775	Pritchard, J. K	Railways, systems, overhead, trolleys	Aug. 22, 1893
512,440	Pruyn, H. S	Railways, systems, closed conduit	Jan. 23, 1894
514,274	Pruyn, H. S	Railways, systems, overhead	Feb. 6, 1894
517,886	Pruyn, H. S	Railways, systems, closed conduit	Apr. 10, 1894
519,346	Pupin, M. S	Telegraphy, circuits and systems	May 8, 1894
519,347	Pupin, M. S	do	May 8, 1894
519,291	Purvis, W. B	Railways, systems, closed conduit	May 1, 1894
514,131	Raab, C	Meters	Feb. 6, 1894
509,680	Rabbidge, P	Telephones, calls	Nov. 28, 1893
511,456	Rabbidge, P	Telephones, electric	Dec. 26, 1893
505,957	Rahner, M.	Magneto-electric	Oct. 3, 1893
511,547	Randall, F. S	Conductors	Dec. 26, 1893
512,217	Randall, P. M	Annunciators, time	Jan. 2, 1894
514,275	Randolph, L. S	Electrolysis, aqueous bath	Feb. 6, 1894
502,530	Ran, O	Railways, systems, overhead, trolleys	Aug. 1, 1893
503,805	Reckenzaum, A	Meters	Aug. 22, 1893
504,455	Reed, C. J	Batteries, secondary	Sept. 5, 1893
510,612	Reed, C. J	Telegraphy, circuits and systems	Dec. 12, 1893
510,613	Reed, C. J	Conductors, anti-inductive	Dec. 12, 1893
521,891	Reed, C. J	Railways, systems	June 26, 1894
521,892	Reed, C. J	do	June 26, 1894
521,089	Reed, W. B	Meters	June 5, 1894
500,614	Reist, H. G	Magneto-electric	July 4, 1893
501,960	Reist, H. G	do	July 25, 1893
508,636	Reist and Fiske	do	Nov. 14, 1893
508,637	Reist, H. G	do	Nov. 14, 1893
506,830	Requa, L. F	Conductors	Oct. 17, 1893
517,664	Reubel, E.	Cut-outs, mechanical, oscillating springs	Apr. 3, 1894
506,729	Rex, B. F	Telegraphy, circuit closers	Oct. 17, 1893
518,511	Rex, B. F	Railway signals, cab, sectional rail	Apr. 17, 1894
508,638	Rice, E. W	Regulators, alternating	Nov. 14, 1893
510,487	Rice, E. W., jr	Lighting, systems, hand regulation	Dec. 12, 1893
516,835	Rice, E. W., jr	Lighting, systems, automatic regulation	Mar. 20, 1894
516,836	Rice, E. W., jr	Systems of distribution	Mar. 20, 1894
516,837	Rice, E. W., jr	Magneto-electric	Mar. 20, 1894
521,671	Rice, E. W., jr	do	June 19, 1894
517,299	Rice and Williams	Telephones, calls, reed	Mar. 27, 1894
513,729	Richards, F. H	Telephones, multiple, electrode	Jan. 30, 1894
513,730	Richards, F. H	Telephones, electric	Jan. 30, 1894
521,220	Richards, W. L	Telephones, granular	June 12, 1894
501,961	Richardson, C. H	Regulators	July 25, 1893
508,630	Richardson, C. H	Motors, reciprocating	Nov. 7, 1893
503,750	Richardson, C. M	Regulators	Aug. 22, 1893
501,628	Richardson, J. C	Electrolysis, aqueous bath	July 18, 1893
508,241	Richardson, J. C	Electrolysis, aqueous bath, chemicals	Nov. 7, 1893
509,328	Ricke, G. H	Railways, conductor supports and insulators	Nov. 21, 1893
507,689	Ricker, A. L	Magneto-electric	Oct. 31, 1893
507,690	Ricker, A. L	do	Oct. 31, 1893
515,020	Ricker, A. L	Inductariums, transformers, stationary	Feb. 20, 1894
518,768	Ricker, A. L	Magneto-electric	Apr. 24, 1894
520,169	Ricker, A. L	do	May 22, 1894
514,686	Rickey, I. E	Annunciators, drop systems	Feb. 13, 1894
516,167	Rider and Lewis	Heaters	Mar. 6, 1894
515,969	Ries, E. E	Lights, sockets and keys	Mar. 6, 1894
515,970	Ries, E. E	Rheostats	Mar. 6, 1894
515,971	Ries, E. E	Lights, sockets and keys	Mar. 6, 1894
519,272	Ries and Scott	Motors, alternating	May 1, 1894
500,366	Riley and Selden	Railway signals, block	Feb. 27, 1894
516,771	Ritzmann, W	Alarms, burglar	Mar. 20, 1894
508,344	Rivenburgh, A	Lights, incandescent, special features	Nov. 7, 1893
515,613	Roberts, C. A	Magneto-electric	Feb. 27, 1894
511,862	Roberts, C. H	Railways, systems, telpher	Jan. 2, 1894
511,459	Roberts, I. L	Lights, filaments and carbons	Dec. 26, 1893
517,169	Roberts, J. K	Elevators	Mar. 27, 1894
516,840	Robinson, C	Motors	Mar. 20, 1894
505,370	Robinson, E. R	Railways, systems, closed conduit	Sept. 19, 1893
516,839	Robinson, L. T	Galvanometers	Mar. 20, 1894
507,691	Robinson, M	Lighting, systems, test	Oct. 31, 1893
517,591	Robinson, M	Insulators	Apr. 3, 1894



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511,214	Robinson and Perkins	Magneto-electric	Dec. 19, 1893
517,069	Rockwell, F. C.	Lights, incandescent	Mar. 27, 1894
512,843	Rodges, H. S.	Magneto-electric	Jan. 16, 1894
502,104	Roe, A. R.	Lighting, systems, hand regulators	July 25, 1893
502,105	Roe, A. R.	do	July 25, 1893
510,367	Roe, A. R.	Motors, reciprocating	Dec. 5, 1893
517,531	Roehl, C. E.	Railways, systems, converters	Apr. 3, 1894
512,327	Rogers and Fracker	Railways, systems, battery	Jan. 9, 1894
508,642	Rohrer, A. L.	Lights, arc, special features	Nov. 14, 1893
521,183	Rolfé, C. A.	Telegraphy, fire, variable signal, dial	June 12, 1894
513,956	Ross, F. W.	Annunciators, drop	Jan. 30, 1894
521,046	Ross, F. W.	do	June 5, 1894
513,420	Rowland, H. A.	Inductariums, transformers, stationary	Jan. 23, 1894
513,421	Rowland, H. A.	do	Jan. 23, 1894
513,422	Rowland, H. A.	do	Jan. 23, 1894
512,907	Rowley, S. B.	Railways, systems	Jan. 16, 1894
515,502	Rowley, L. B.	Batteries, secondary	Feb. 27, 1894
517,170	Rowley, L. B.	Heaters	Mar. 27, 1894
504,367	Rudd, C. H.	Telegraphy, circuits and systems	Sept. 5, 1893
504,751	Rudd, C. H.	Lighting, systems, test	Sept. 12, 1893
504,752	Rudd, C. H.	do	Sept. 12, 1893
504,753	Rudd, C. H.	do	Sept. 12, 1893
504,754	Rudd, C. H.	Galvanometers	Sept. 12, 1893
511,461	Rudd, C. H.	Lighting, systems	Dec. 26, 1893
511,462	Rudd, C. H.	Telegraphy, fire, automatic	Dec. 26, 1893
507,170	Rupel, J. M.	Telegraphy, railway car	Oct. 24, 1893
515,022	Rushmore, S. W.	Lights, arc, positive feed, gear-clutch	Feb. 20, 1894
502,384	Ryan, H. J.	Magneto-electric	Aug. 1, 1893
517,243	Sabin and Hampton	Telephones, systems	Mar. 27, 1894
518,331	Sabin and Hampton	Telephones, systems, multiple switch-board, test.	Apr. 17, 1894
518,332	Sabin and Hampton	Telephones, systems, multiple switch-board, divided central.	Apr. 17, 1894
518,333	Sabin and Hampton	do	Apr. 17, 1894
518,334	Sabin and Hampton	Telephones, systems	Apr. 17, 1894
520,083	Sabin and Hampton	Telephones, systems, multiple switch-board, divided central.	May 22, 1894
501,580	Sachs, G.	Lights, sockets and keys	July 18, 1893
502,207	Sachs, J.	Telegraphy, fire	July 25, 1893
511,163	Sachs, J.	Railway signals	Dec. 19, 1893
513,469	Sachs, J.	Railways, systems	Jan. 23, 1894
514,279	Sachs, J.	Telegraphy, fire	Feb. 6, 1894
515,503	Sachs, J.	do	Feb. 27, 1894
516,878	Sachs, J.	Igniting devices, manual	Mar. 20, 1894
521,553	Samuels, B.	Railway signals, cab, sectional rail	June 19, 1894
514,775	Sanders, S. T.	Alarms	Feb. 13, 1894
11,397	Sauche, H.	(Reis.) Connectors	Jan. 2, 1894
11,398	Sauche, H.	(Reis.) do	Jan. 2, 1894
514,202	Sauer and Hentyschel	Alarms, burglar	Feb. 6, 1894
501,445	Sayres, W. B.	Conductors, underground	July 11, 1893
516,553	Sayres, W. B.	Magneto-electric	Mar. 13, 1894
514,501	Scattergood, C. F.	Annunciators	Feb. 13, 1894
23,112	Scattergood, C. F.	(Design) Electrolysis, aqueous bath apparatus	Mar. 13, 1894
502,322	Scharf, P.	Lights, incandescent	Aug. 1, 1893
504,095	Schweizer, E.	Clocks, electric	Aug. 29, 1893
505,233	Schmid, C.	Lights, arc, gravity feed, clutch	Sept. 19, 1893
505,926	Schmid, A.	Magneto-electric	Oct. 3, 1893
505,927	Schmid, A.	do	Oct. 3, 1893
519,097	Schmid, A.	do	May 1, 1894
519,093	Schmid and Lamme	Regulators	May 1, 1894
520,223	Schneider, G. L.	Lighting, systems	May 22, 1894
520,340	Schoop, P.	Batteries, secondary	May 22, 1894
513,829	Schureman, D. S.	Telegraphy, circuit closers, thermal	Jan. 30, 1894
516,025	Schuremann, D. S.	Bells	Mar. 6, 1894
509,050	Schweiger, W. J.	do	Nov. 21, 1893
503,709	Schwenckle, C.	Telegraphy, fire, variable signal, dial	Aug. 22, 1893
505,923	Scott, C. F.	Systems of distribution	Oct. 3, 1893
508,489	Scott, C. F.	Magneto-electric, connecting devices	Nov. 14, 1893
513,425	Scott, C. F.	Systems of distribution	Jan. 23, 1894
515,885	Scott, C. F.	Transmission of power	Mar. 6, 1894
520,970	Scott, C. F.	Systems of distribution	June 5, 1894
521,051	Scott, C. F.	Transmission of power	June 5, 1894
501,163	Scribner, C. E.	Telephones, switches	July 11, 1893
501,169	Scribner, C. E.	Telephones, systems	July 11, 1893
501,170	Scribner, C. E.	Lights, arc, gravity feed, clutch	July 11, 1893
501,347	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	July 18, 1893



No.	NAME.	CLASS.	DATE.
502,471	Scribner, C. E	Lights, arc, gravity feed, clutch	Aug. 1, 1893
502,535	Scribner, C. E	do	Aug. 1, 1893
502,536	Scribner, C. E	do	Aug. 1, 1893
502,768	Scribner, C. E	Telephones, systems	Aug. 8, 1893
502,769	Scribner, C. E	do	Aug. 8, 1893
502,770	Scribner, C. E	Telephones, systems, multiple switch-board	Aug. 8, 1893
502,771	Scribner, C. E	do	Aug. 8, 1893
502,772	Scribner, C. E	do	Aug. 8, 1893
502,773	Scribner, C. E	do	Aug. 8, 1893
502,774	Scribner, C. E	do	Aug. 8, 1893
502,775	Scribner, C. E	do	Aug. 8, 1893
503,099	Scribner, C. E	Telephones, systems	Aug. 8, 1893
503,555	Scribner, C. E	Telephones, switch-board	Aug. 15, 1893
504,249	Scribner, C. E	Telephones, systems	Aug. 29, 1893
504,250	Scribner, C. E	do	Aug. 29, 1893
504,251	Scribner, C. E	do	Aug. 29, 1893
508,054	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Nov. 7, 1893
509,186	Scribner, C. E	do	Nov. 21, 1893
509,953	Scribner, C. E	Regulators	Dec. 5, 1893
509,954	Scribner, C. E	do	Dec. 5, 1893
505,955	Scribner, C. E	do	Dec. 5, 1893
509,956	Scribner, C. E	Annunciators	Dec. 5, 1893
511,464	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Dec. 26, 1893
512,227	Scribner, C. E	Regulators	Jan. 2, 1894
512,397	Scribner, C. E	do	Jan. 9, 1894
512,398	Scribner, C. E	Telephones, systems	Jan. 9, 1894
512,399	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Jan. 9, 1894
512,400	Scribner, C. E	Telegraphy, fire	Jan. 9, 1894
512,401	Scribner, C. E	Lights, arc, gravity feed, clutch	Jan. 9, 1894
512,667	Scribner, C. E	do	Jan. 9, 1894
513,537	Scribner, C. E	Telephones, systems, multiple switch-board, divided central.	Jan. 30, 1894
514,504	Scribner, C. E	Regulators	Feb. 13, 1894
514,505	Scribner and Warner	Lights, arc, gravity feed, clutch	Feb. 13, 1894
514,506	Scribner, C. E	do	Feb. 13, 1894
518,793	Scribner, C. E	do	Apr. 24, 1894
519,876	Scribner, C. E	Telephones, systems	May 15, 1894
520,543	Scribner, C. E	Telephones, systems, multiple switch-board, test.	May 29, 1894
501,258	Sears, W	Indicators	July 11, 1893
504,542	Scagrave, F. E	Railway signals, cab, sectional rail	Sept. 5, 1893
503,100	Seaton, B. C	Railway signals, sectional rail	Aug. 8, 1893
503,101	Seaton, B. C	Connectors	Aug. 8, 1893
510,095	Seavey, G. T	Lamp and gas fittings, shade supports	Dec. 5, 1893
521,867	Seaverns, E. B. V	Lighting, systems	June 26, 1894
518,654	Segerdahl, R	Lights, arc, gravity feed, clutch	Apr. 24, 1894
512,754	Selden, C	Railway signals, sectional rail	Jan. 16, 1894
515,797	Selden, C	Telephones, magnetic	Mar. 6, 1894
520,661	Selden and Riley	Railway signals, block	May 29, 1894
520,710	Selden and Riley	do	May 29, 1894
520,940	Sellers, C	Magneto-electric	June 5, 1894
510,195	Serdniko, J	Telephones, automatic	Dec. 5, 1893
512,331	Seymour, A. P	Cut-outs, thermal	Jan. 9, 1894
514,133	Seymour, H. A	Railways, systems, closed conduit	Feb. 6, 1894
514,134	Seymour, H. A	do	Feb. 6, 1894
514,135	Seymour, H. A	Electric locomotives	Feb. 6, 1894
504,405	Shaaber, M	Railways, systems, overhead, trolleys	Sept. 5, 1893
503,621	Sballenberger, O. B	Systems of distribution	Aug. 22, 1893
501,193	Shaw, A. J	Magneto-electric	July 11, 1893
515,254	Shaw, A. J	Rheostats	Feb. 20, 1894
515,255	Shaw, A. J	Elevators	Feb. 20, 1894
515,256	Shaw, A. J	do	Feb. 20, 1894
515,304	Shaw, A. J	Rheostats	Feb. 20, 1894
517,770	Shaw, A. J	do	Apr. 3, 1894
506,269	Sheehy, R. J	Telegraphy, printing	Oct. 10, 1893
506,270	Sheehy, R. J	do	Oct. 10, 1893
506,271	Sheehy, R. J	do	Oct. 10, 1893
506,272	Sheehy, R. J	do	Oct. 10, 1893
506,273	Sheehy, R. J	do	Oct. 10, 1893
506,274	Sheehy, R. J	Telegraphy, multiple wheel	Oct. 10, 1893
506,275	Sheehy, R. J	Telegraphy, automatic	Oct. 10, 1893
502,777	Sheldon, S. and Rooney, J. J	Magneto-electric	Aug. 8, 1893
505,729	Sherwood, W. J	do	Sept. 26, 1893
515,448	Shomberg, R	Insulators	Feb. 27, 1894

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506,740	Short, S. H	Magneto-electric	Oct. 17, 1893
513,426	Short, S. H	Railways, conductor supports and insulators	Jan. 23, 1894
504,630	Siemens, A	Motors, alternating	Sept. 5, 1893
520,356	Siemens, C. W	Railways, systems, conduit	May 22, 1894
504,370	Silvey, W. L	Batteries, secondary	Sept. 5, 1893
512,757	Silvey, W. L	Batteries, galvanic	Jan. 16, 1894
500,622	Silvey, W. S	Batteries, secondary	July 4, 1893
506,449	Silsbee, S	Medical and surgical	Oct. 10, 1893
520,246	Simoneau, L. E	Telephones, systems, automatic	May 22, 1894
501,540	Singer, P. E	Music, electric actions	July 18, 1893
501,541	Singer, P. E	do	July 18, 1893
501,542	Singer, P. E	do	July 18, 1893
501,543	Singer, P. E	do	July 18, 1893
511,866	Slaugherup, A. F	Alarms	Jan. 2, 1894
515,845	Sloan, W. E	Telegraphy, repeaters	Mar. 6, 1894
520,086	Slocum, H. F	Telephones, electric	May 22, 1894
510,201	Smart, D. V. B	Railways, systems, overhead	Dec. 5, 1893
520,971	Smith and Clabaugh	do	June 5, 1894
519,099	Smith, F. S	Lights, incandescent	May 1, 1894
520,088	Smith, F. S	do	May 22, 1894
518,471	Smith, J. B	Lighting, systems	Apr. 17, 1894
521,274	Smith, J. B	Telephones, switches	June 12, 1894
521,325	Smith, J. B	Telephones, granular	June 12, 1894
501,631	Smith, J. E	Telegraphy, fire	July 18, 1893
501,376	Smith, J. J. and Findlater, F	Magneto-electric	July 11, 1893
521,522	Smith, W. F	Recorders	June 12, 1894
505,561	Smith, W. I	Medical and surgical, electrode	Sept. 26, 1893
504,760	Snedekor, C. T	Lights, arc, special features	Sept. 12, 1893
507,941	Snee, W	Heaters	Oct. 31, 1893
518,971	Sommer, H. P	Time alarms	May 1, 1894
502,325	Sparks, C. H	Alarms, burglar	Aug. 1, 1893
516,543	Spaulding, H. C	Elevators	Mar. 20, 1894
517,773	Speed, Barker and Frank	Cut-outs, mechanical, oscillating snap	Apr. 3, 1894
504,632	Spencer, T	Lighting, systems	Sept. 5, 1893
501,472	Spencer, T	Telephones, systems	July 11, 1893
502,472	Spencer, T	Annunciators, drop systems	Aug. 1, 1893
505,730	Spencer, T	Telephones, systems	Sept. 26, 1893
519,849	Spencer, T	Lighting, systems	May 15, 1894
501,194	Sperry, E. A	Magneto-electric	July 11, 1893
501,195	Sperry, E. A	Electric locomotives	July 11, 1893
501,968	Sperry, E. A	Railways, systems, overhead, trolleys	July 25, 1893
502,020	Sperry, E. A	Electric locomotives	July 25, 1893
503,443	Sperry, E. A	Railways, systems, overhead	Aug. 15, 1893
505,994	Sperry, E. A	Railways, systems, overhead, trolleys	Oct. 3, 1893
509,776	Sperry, E. A	Motors, hand-operating devices	Nov. 28, 1893
515,374	Sperry, E. A	do	Feb. 27, 1894
513,062	Sperry and Mills	Regulators	Jan. 16, 1894
504,255	Spragne, F. J. and P. F. O	Railways, systems, overhead, trolleys	Aug. 29, 1893
501,849	Standish, B. H	Medical and surgical, body-wear	July 18, 1893
501,450	Stanley, L. T	Alarms, burglar	July 11, 1893
521,423	Stanley, L. T	Cut-outs, electro-magnetic	June 12, 1894
503,622	Stanley, W., jr	Systems of distribution	Aug. 22, 1893
503,188	Stanley, W., jr	Motors, alternating	Nov. 7, 1893
508,493	Stanley, W., jr	Regulators	Nov. 14, 1893
520,620	Stanley, W., jr	Motors, alternating	May 29, 1894
505,859	Stanley, W. and Kelly, J. T	do	Oct. 3, 1893
505,860	Stanley, W. and Kelly, J. T	do	Oct. 3, 1893
507,391	Stanley, W., jr., and Kelly, J. F	Systems of distribution	Oct. 24, 1893
515,977	Stanley, Kelly and Chesney	Motors alternating	Mar. 6, 1894
11,400	Stanley and Kelly	Systems of distribution (Reis.)	Jan. 30, 1894
517,199	Stannard, J. E	Steam valves, electric throttles	Mar. 27, 1894
509,964	Steiner, J	Telegraphy, keys	Dec. 5, 1893
513,370	Steinmetz, C. P	Transmission of power	Jan. 23, 1894
506,563	Stevens, F	Cut-outs, mechanical, oscillating snap	Oct. 10, 1893
502,475	Stevens, G. W	Railways, switches, automatic	Aug. 1, 1893
513,250	Stewart, J. B	Cut-outs, electro-magnetic	Jan. 23, 1894
517,668	Still, W. J	Motors	Apr. 3, 1894
517,669	Still, W. J	do	Apr. 3, 1894
511,172	Stinde, M. E	Telegraphy, transmitters	Dec. 19, 1893
512,567	Stine, W. M	Batteries, secondary	Jan. 9, 1894
515,434	Stirn, L	Lights, incandescent, special features	Feb. 27, 1894
515,435	Stirn, L	Lights, sockets and keys	Feb. 27, 1894
507,568	Stone, J. S	Telephones, systems	Oct. 31, 1893
507,694	Stone, J. S	Telephones, systems, central	Oct. 31, 1893
508,255	Stone, J. S	Telephones, systems	Nov. 7, 1893
509,965	Stone, J. S	do	Dec. 5, 1893
511,173	Stone and Webster	Railways, systems	Dec. 19, 1893



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507,569	Stovey, F. G.	Alarms, burglar	Oct. 31, 1893.
500,822	Strabss, J. B.	Alarms	July 4, 1893.
518,357	Straus, T.	Railways, systems, overhead, trolleys	Apr. 17, 1894.
504,636	Stromberg, A. and Carlson, A.	Telephones, magnetic	Sept. 5, 1893.
516,777	Stromberg and Carlson	Telephones, switches	Mar. 20, 1894.
521,188	Stromberg and Carlson	Telephones, magnetic	June 12, 1894.
521,514	Stromberg and Carlson	Telephones, switches	June 19, 1894.
11,423	Stromberg, A. (Reis.)	Alarms, burglar	June 26, 1894.
505,539	Strong, G. S.	Magneto-electric	Sept. 26, 1893.
519,932	Strong and Reed	Railway signals, cab, sectional rail	May 15, 1894.
513,345	Strouse, L.	Annunciators, drop	Jan. 23, 1894.
506,347	Struble, C. B.	Igniting devices, manual	Oct. 10, 1893.
513,626	Sturgeon, C. J.	Regulators	Jan. 30, 1894.
516,239	Sturts, C. F. A.	Alarms, burglar	Mar. 13, 1894.
516,240	Sturts, C. F. A.	do	Mar. 13, 1894.
508,644	Swan, A.	Cut-outs, thermal	Nov. 14, 1893.
516,844	Swan, A.	Lights, sockets and keys	Mar. 20, 1894.
516,689	Swan, G. C.	Lights, incandescent	Mar. 20, 1894.
517,498	Swarty, G. W.	Lighting, systems, car	Apr. 3, 1894.
513,839	Talmdage, C. H.	Lighting, systems, automatic regulation	Jan. 30, 1894.
513,347	Taylor, H. H.	Magneto-electric	Jan. 23, 1894.
516,558	Taylor, J. D.	Railway signals, sectional rail	Mar. 13, 1894.
516,903	Taylor, J. D.	do	Mar. 20, 1894.
511,559	Tesla, N.	Transmission of power	Dec. 26, 1893.
511,560	Tesla, N.	do	Dec. 26, 1893.
511,915	Tesla, N.	do	Jan. 2, 1894.
511,916	Tesla, N.	Magneto-electric	Jan. 2, 1894.
512,340	Tesla, N.	Electro-magnets	Jan. 9, 1894.
514,167	Tesla, N.	Conductors	Feb. 6, 1894.
514,168	Tesla, N.	Systems of distribution	Feb. 6, 1894.
514,170	Tesla, N.	Lights, incandescent	Feb. 6, 1894.
514,972	Tesla, N.	Railways, systems	Feb. 20, 1894.
514,973	Tesla, N.	Meters	Feb. 20, 1894.
502,541	Thalaker, C.	Cut-outs, thermal	Aug. 1, 1893.
514,077	Thelder, J. D.	Regulators	Feb. 6, 1894.
514,078	Thelder, J. D.	do	Feb. 6, 1894.
510,102	Thiel, H. K.	Magneto-electric	Dec. 5, 1893.
500,827	Thomas, G. L. and Seward, E. E.	Railway signals, cab	July 4, 1893.
507,247	Thompson, C. H.	Railways, systems, overhead, trolleys	Oct. 24, 1893.
510,303	Thompson, L. E.	Lights, arc, special features	Dec. 5, 1893.
518,015	Thompson, R. W.	Railways, systems, overhead, trolleys	Apr. 10, 1894.
521,144	Thompson, T. J.	Annunciators, drop	June 5, 1894.
500,629	Thomson, E.	Cut-outs, thermal	July 4, 1893.
500,630	Thomson, E.	Systems of distribution	July 4, 1893.
500,631	Thomson, E.	Rheostats	July 4, 1893.
501,114	Thomson, E.	Telegraphy, lightning arresters	July 11, 1893.
501,172	Thomson, E.	Lights, incandescent	July 11, 1893.
502,022	Thomson, E.	Galvanometers	July 25, 1893.
502,330	Thomson, E.	Cut-outs, thermal	Aug. 1, 1893.
502,788	Thomson, E.	Regulators	Aug. 8, 1893.
506,383	Thomson, E.	Cut-outs, thermal	Oct. 10, 1893.
508,646	Thomson, E.	Systems of distribution	Nov. 14, 1893.
508,647	Thomson, E.	Lighting, systems	Nov. 14, 1893.
508,648	Thomson, E.	Telegraphy, lightning arresters	Nov. 14, 1893.
508,649	Thomson, E.	do	Nov. 14, 1893.
508,650	Thomson, E.	Inductariums, transformers, stationary	Nov. 14, 1893.
508,651	Thomson, E.	Magneto-electric	Nov. 14, 1893.
508,652	Thomson, E.	Electro-magnetic	Nov. 14, 1893.
508,653	Thomson, E.	Insulating compound	Nov. 14, 1893.
508,654	Thomson, E.	Inductariums, transformers, stationary	Nov. 14, 1893.
508,655	Thomson, E.	do	Nov. 14, 1893.
508,656	Thomson, E.	Lights, arc, positive feed	Nov. 14, 1893.
508,657	Thomson, E.	Regulators, alternating	Nov. 14, 1893.
508,658	Thomson, E.	Regulators	Nov. 14, 1893.
508,659	Thomson, E.	Lights, incandescent	Nov. 14, 1893.
508,660	Thomson, E.	Meters	Nov. 14, 1893.
508,661	Thomson, E.	do	Nov. 14, 1893.
508,662	Thomson, E.	Galvanometers	Nov. 14, 1893.
509,499	Thomson, E.	Regulators	Nov. 23, 1893.
511,375	Thomson, E.	do	Dec. 26, 1893.
511,376	Thomson, E.	Galvanometers	Dec. 26, 1893.
503,445	Thomson, E.	Magneto-electric	Aug. 15, 1893.
516,666	Thomson, E.	Railways, systems	Mar. 20, 1894.
516,845	Thomson, E.	Magneto-electric	Mar. 20, 1894.
516,846	Thomson, E.	Regulators, alternating	Mar. 20, 1894.
516,847	Thomson, E.	do	Mar. 20, 1894.
516,848	Thomson, E.	Magneto-electric	Mar. 20, 1894.



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516,849	Thomson, E	Motors, alternating	Mar. 20, 1894
516,850	Thomson, E	Inductoriums, transformers, stationary	Mar. 20, 1894
518,290	Thomson, E	Magneto-electric	Apr. 17, 1894
518,291	Thomson, E	Motors	Apr. 17, 1894
519,076	Thomson, E	Inductoriums, transformers, stationary	May 1, 1894
520,809	Thomson, E	Telegraphy, lightning arresters	June 5, 1894
520,810	Thomson, E	Motors	June 5, 1894
520,811	Thomson, E	Meters	June 5, 1894
521,684	Thomson, E	do	June 19, 1894
521,685	Thomson, E	do	June 19, 1894
501,546	Thomson, E. and Harthan, C. E.	Metal working	July 18, 1893
513,349	Thomson and Rice	Transmission of power	Jan. 23, 1894
521,394	Thomson, W.	Meters	June 12, 1894
510,209	Thorn, C., jr.	Telegraphy, duplex	Dec. 5, 1893
509,705	Threlfall, R.	Motors, reciprocating	Nov. 28, 1893
501,173	Thum, F. A.	Lighting, systems, hand regulation	July 11, 1893
520,547	Thunhorst, F. J.	Telegraphy, fire, alarms and extinguishers	May 29, 1894
520,213	Tighe and Childs	Railways, conductor supports and insulators	May 22, 1894
514,739	Timbrell and Fyfe	Lights, incandescent	Feb. 13, 1894
503,505	Timmis, I. A.	Railway signals, cab, sectional rail	Aug. 15, 1893
506,282	Timmis, I. A.	Electro-magnets	Oct. 10, 1893
517,940	Tisdale, C. D.	Railways, systems, closed conduit	Apr. 10, 1894
518,293	Tisdale, C. D.	Electric locomotives	Apr. 17, 1894
521,516	Todd, A. H.	Igniting devices, portable	June 19, 1894
501,548	Tonsley, E. M.	Railways, systems, overhead, trolleys	July 13, 1893
503,778	Trimble, W. D.	Insulators	Aug. 22, 1893
508,587	Trumbell, G. A.	Connectors	Nov. 14, 1893
511,821	Trumpy, J.	Batteries, secondary	Jan. 2, 1894
511,822	Trumpy, J.	do	Jan. 2, 1894
519,077	Trumpy, J.	Cut-outs, mechanical	May 1, 1894
504,002	Turad, L. J.	Telegraphy, circuit closers, thermal	Aug. 29, 1893
500,828	Turbayne, W. A.	Telegraphy, lightning arresters	July 4, 1893
500,829	Turbayne, W. A.	Lights, arc, special features	July 4, 1893
513,219	Turnbull, C., jr.	Bells	Jan. 23, 1894
512,220	Turnbull, C., jr.	do	Jan. 23, 1894
512,637	Turnbull, J. W.	Lights, incandescent	Jan. 9, 1894
516,853	Turner, O. N.	Magneto-electric	Mar. 20, 1894
501,117	Tyler, H. L.	do	July 11, 1893
509,266	Usher, E. P.	Batteries, secondary	Nov. 21, 1893
509,267	Usher, E. P.	do	Nov. 21, 1893
509,268	Usher, E. P.	do	Nov. 21, 1893
509,269	Usher, E. P.	do	Nov. 21, 1893
509,270	Usher, E. P.	do	Nov. 21, 1893
509,271	Usher, E. P.	do	Nov. 21, 1893
509,272	Usher, E. P.	do	Nov. 21, 1893
506,890	Uttinger, A.	Lights, arc, positive feed, gear-clutch	Oct. 17, 1893
509,002	Vail, J. H.	Railways, systems, circuit, multiple arc	Nov. 21, 1893
513,846	Valley, G.	Railways, systems, overhead	Jan. 30, 1894
513,847	Valley, G.	do	Jan. 30, 1894
502,229	Van Depoele, C. J.	Railways, systems, overhead, trolleys	July 25, 1893
507,945	Van Depoele, C. J.	Transmission of power	Oct. 31, 1893
507,946	Van Depoele, C. J.	Motors, reciprocating	Oct. 31, 1893
513,350	Van Emon, B. C.	Regulators	Jan. 23, 1894
500,726	Van Nuis, C. S.	Telegraphy, lightning arresters	July 4, 1893
511,824	Veeder, C. H.	Railways, systems, overhead, trolleys	Jan. 2, 1894
502,449	Verley, H. S. L.	Telegraphy, relays and sounders	Aug. 1, 1893
519,142	Verley, H. S. L.	do	May 1, 1894
521,396	Vidal and Hervieu	Clocks, electric	June 12, 1894
513,352	Vogt, A. L.	Annunciators, drop systems	Jan. 23, 1894
502,333	Voorhees, G. T.	Lighting, ceiling block	Aug. 1, 1893
504,746	Von der Poppenbury, J.	Batteries, galvanic	Sept. 12, 1893
515,763	Von Grabowski, C.	Electrolysis, aqueous bath	Mar. 6, 1894
520,263	Von Hefner, F.	Lighting, systems	May 22, 1894
502,533	Von Siemens, G. W.	Railways, systems, converters	Aug. 1, 1893
502,539	Von Siemens, G. W.	do	Aug. 1, 1893
502,632	Von Siemens, G. W.	Systems of distribution	Aug. 1, 1893
509,403	Von Siemens, G. W.	Railways, systems, closed conduit	Nov. 28, 1893
520,274	Von Siemens, G. W.	Railways, systems, overhead	May 22, 1894
521,131	Voss, D. C.	Lights, incandescent	June 5, 1894
514,047	Waddell, M.	Magneto-electric	Feb. 6, 1894
516,170	Waddell and Entz	do	Mar. 6, 1894
514,139	Wagner, G. G.	Lights, arc, positive feed, gear-clutch	Feb. 6, 1894
501,550	Wagner, H. C.	Medical and surgical, body-wear	July 18, 1893
514,524	Waite, H. F.	Friction generators	Feb. 13, 1894
516,713	Waite, H. F.	Motors	Mar. 20, 1894
520,908	Waite, H. F.	Inductoriums	June 5, 1894
508,063	Walch, G. T.	Lightning rods	Nov. 7, 1893

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510,217	Walker, J. E.	Railways, conductor supports and insulators	Dec. 5, 1893
501,306	Walker, W. J. and Bedford, A. L.	Alarms, burglar	July 11, 1893
520,127	Walter, H. E.	Telegraphy, fire, variable signal, dial	May 22, 1894
509,188	Ward, B. B.	Lights, arc, gravity feed, gear-clutch	Nov. 21, 1893
513,545	Ward, B. B.	Alarms	Jan. 30, 1894
518,337	Warner, C. D.	Clocks, electric	Apr. 17, 1894
503,180	Warner, E. P.	Cut-outs, mechanical	Aug. 15, 1893
504,379	Warner, E. P.	Magneto-electric	Sept. 5, 1893
505,686	Warner, E. P.	Motors, hand-operating devices	Sept. 26, 1893
512,774	Warner, E. P.	Cut-outs, mechanical	Jan. 16, 1894
505,241	Waterhouse, A. G.	Lighting, systems, automatic regulation	Sept. 19, 1893
518,359	Waterhouse, A. G.	Systems of distribution	Apr. 17, 1894
518,360	Waterhouse, A. G.	Regulators	Apr. 17, 1894
514,975	Watson, N. M.	Annunciators, drop systems	Feb. 20, 1894
516,956	Watson, R.	Elevators	Mar. 20, 1894
515,805	Watson, W. W.	Time checks	Mar. 6, 1894
512,077	Wayland, J.	Railway signals, sectional rail	Jan. 2, 1894
517,502	Weaver, J.	Telegraphy, circuit closers, thermal	Apr. 3, 1894
503,101	Webb, H. L.	Connectors	Aug. 15, 1893
502,687	Weber, A.	Lights, arc, special features	Aug. 1, 1893
509,061	Weber and Weber	Telephones, supports	Nov. 21, 1893
520,467	Weber, W.	do	May 29, 1894
509,505	Weight and Kinsey	Motors, hand-operating devices	Nov. 28, 1893
507,339	Weir, R.	Railways, systems, closed conduit	Oct. 24, 1893
520,152	Welch, R. K.	Magneto-electric	May 22, 1894
511,259	Weller, F. A.	Rheostats	Dec. 19, 1893
513,745	Weller, F. A.	Motors	Jan. 30, 1894
515,806	Wells, H. J.	Lighting, systems	Mar. 6, 1894
516,386	Wenström, J.	Magneto-electric	Feb. 27, 1894
509,500	Werline, H. E.	Lighting, ceiling block	Nov. 28, 1893
509,501	Werline, H. E.	do	Nov. 28, 1893
509,502	Werline, H. E.	Shade supports	Nov. 28, 1893
520,279	Werline, H. E.	Cut-outs, mechanical	May 22, 1894
516,213	Werner and Werner	Telegraphy, fire, automatic	May 1, 1894
503,183	Wessel, F. A.	Motors, alternating	Aug. 15, 1893
511,005	Weston, E.	Telegraphy, relays and sounders	Dec. 19, 1893
23,140	Weston, E. (Reis.)	Measuring instruments	Mar. 20, 1894
520,975	Westinghouse and Scott	Railways, systems, converters	June 5, 1894
502,088	Wetmore, E. P.	Railways, conductor supports and insulators	July 25, 1893
509,985	Weyrick, O.	Telegraphy, circuit closers	Dec. 5, 1893
513,960	Wheat, A. C.	Telephones, switches	Jan. 30, 1894
503,106	Wheeler, S. S.	Magneto-electric	Aug. 8, 1893
503,690	Wheeler, S. S.	Motors, hand-operating devices	Aug. 22, 1893
506,353	Wheelock, B. J.	Batteries, galvanic	Oct. 10, 1893
516,982	White, A. C.	Telephones, details	Mar. 20, 1894
511,570	White, H. P.	Motors	Dec. 26, 1893
513,065	White, H. P.	Regulators	Jan. 16, 1894
510,457	Whitehall and Whitehall	Annunciators, step-by-step	Dec. 12, 1893
518,906	Whittingham, G. H.	Regulators	Apr. 24, 1894
520,280	Whittingham, G. H.	do	May 22, 1894
516,253	Whitney, E. R.	Batteries, secondary	Mar. 13, 1894
501,309	Wightman, M. J. and Lemp, H.	Regulators	July 11, 1893
501,701	Wilder, C. M.	Railway signals	July 18, 1893
507,297	Wilkes, G.	Magneto-electric	Oct. 24, 1893
512,853	Wilkes, G.	do	Jan. 16, 1894
515,633	Wilson, A. G.	Railway signals, sectional rail	Feb. 27, 1894
510,460	Wilson, D. H.	Magneto-electric	Dec. 12, 1893
514,980	Wilson, D. H.	Telephones, systems	Feb. 20, 1894
514,979	Wilson, D. H.	Batteries, galvanic	Feb. 20, 1894
514,981	Wilson, D. H.	Inductariums, induction coils	Feb. 20, 1894
507,396	Wilson, J. F.	Electric locomotives	Oct. 24, 1893
508,559	Willard, T. A.	Batteries, secondary	Nov. 14, 1893
516,038	Willard, T. A.	Batteries, secondary, charging and discharging	Mar. 6, 1894
519,881	Willard, T. A.	Regulators	May 15, 1894
508,262	Williams, G. H.	Motors, reciprocating	Nov. 7, 1893
514,801	Williams, J. A.	Railways, systems, overhead, trolleys	Feb. 13, 1894
507,299	Williams, M. S.	Railways, conductor supports and insulators	Oct. 24, 1893
507,867	Willibrant, H.	Lights, arc, positive feed, clutch	Oct. 31, 1893
507,298	Willinghaus, W.	Medical and surgical	Oct. 24, 1893
506,294	Willoughby, C.	Telegraphy, transmitters	Oct. 10, 1893
514,580	Willyoung, E. G.	Lighting, systems	Feb. 13, 1894
514,581	Willyoung, E. G.	Galvanometers	Feb. 13, 1894
516,855	Willyoung, E. G.	do	Mar. 20, 1894
517,253	Willyoung, E. G.	do	Mar. 27, 1894
514,582	Willyoung and Garver	do	Feb. 13, 1894
510,661	Winkler, C. F.	Electric locomotives	Dec. 12, 1893
510,662	Winkler, C. F.	Motors	Dec. 12, 1893



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510,947	Winkler, C. F	Electric locomotives	Dec. 19, 1893
514,109	Winkler, C. F	do	Feb. 6, 1894
517,634	Winslow, G. H	Insulators	Apr. 3, 1894
517,714	Winter, J. F	Regulators	Apr. 3, 1894
512,422	Wirshing, E. A	Telegraphy, printing, multiple wheel	Jan. 9, 1894
508,665	Wirt, H. C	Cut-outs, thermal	Nov. 14, 1893
518,301	Wirt, H. C	Insulators	Apr. 17, 1894
502,156	Wiseman, A. G	Clocks, electric	July 25, 1893
502,157	Wiseman, A. G	do	July 25, 1893
502,215	Wiseman, A. G	do	July 25, 1893
510,663	Wollensack, J. F	Telegraphy, circuit closers	Dec. 12, 1893
518,800	Woltmann, E	Cut-outs, mechanical, oscillating snap	Apr. 24, 1894
502,340	Wood, J. J	Rheostats	Aug. 1, 1893
507,194	Wood, J. J	Magneto-electric	Oct. 24, 1893
507,343	Wood, J. J	Lights, arc, special features	Oct. 24, 1893
507,344	Wood, J. J	Magneto-electric	Oct. 24, 1893
507,345	Wood, J. J	Rheostats	Oct. 24, 1893
512,424	Wood, J. J	Magneto-electric	Jan. 9, 1894
512,425	Wood, J. J	do	Jan. 9, 1894
514,140	Wood, J. J	do	Feb. 6, 1894
515,850	Wood, J. J	Lights, arc, gravity feed, gear-clutch	Mar. 6, 1894
520,128	Wood, J. J	Lighting, systems	May 22, 1894
520,129	Wood, J. J	Galvanometers	May 22, 1894
507,606	Woods, G. T	Railways, systems, closed conduit	Oct. 31, 1893
509,065	Woods, G. T	do	Nov. 21, 1893
514,583	Woolverton, J. E	Lights, arc, positive feed	Feb. 13, 1894
509,066	Wooter, J. P	Telegraphy, printing	Nov. 21, 1893
509,421	Wörmer, A	Railways, systems, closed conduit	Nov. 28, 1893
503,710	Worner, A	Railways, systems, conduit	Aug. 22, 1893
517,134	Worthen, W. E	Railways, systems, batteries	Mar. 27, 1894
521,303	Wotton, J. A	Telephones, systems, multiple switch-board	June 12, 1894
511,742	Wotton and Bostrom	Inductoriums, induction coils	Dec. 26, 1893
516,784	Wriest, P., jr	Motors	Mar. 20, 1894
521,924	Wright, P	Systems of distribution	June 26, 1894
521,925	Wright, P	Lighting, systems	June 26, 1894
501,201	Wurts, A	Cut-outs, thermal	July 11, 1893
503,186	Wurts, A	Telegraphy, condensers	Aug. 15, 1893
505,911	Wurts, A	Rheostats	Oct. 3, 1893
505,912	Wurts, A	Insulators	Oct. 3, 1893
509,783	Wurts, A	Telegraphy, lightning arresters	Nov. 28, 1893
509,784	Wurts, A	do	Nov. 28, 1893
507,959	Wyman, C. T	Time alarms	Oct. 31, 1893
518,907	Wyman, H. B	Insulators	Apr. 24, 1894
502,216	Wynne, F	Railways, systems, closed conduit	July 25, 1893
503,187	Young, J	Annunciators	Aug. 15, 1893
502,842	Zell, R. R	Railways, systems, conduit	Aug. 8, 1893
511,229	Zobel, A	Lights, incandescent	Dec. 19, 1893





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